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Editorial AS WE SEE IT

Various international conferences and discussions that have been under way for a good while past have not appeared to make very satisfactory headway. Near-summit conclaves have been obliged to admit little success by and large, and the real summit gathering now in early prospect is certain to find the going none too smooth. There are many and often glib explanations for these failures or near failures, and for the problems which seem to be all but insoluble at the summit. Most of these make sense so far as they go, but few if any of them get to the roots of current difficulties. This lack of perspective in this country is to be especially regretted now that a Presidential election campaign is getting under way. Political discussions of such questions rarely shed much real light on such basic matters as those which are now involved in international relations, but somehow better popular understanding must be achieved.

Personal and national internal politics, of course, always play a role in matters of this sort, but underlying all such factors are certain historic trends of the times and certain very unfortunate experiences of recent years which must be regarded as the real obstacles to international accords. In the first place, sad experience with international agreements and international behavior between the two world wars has made a deep impression upon the minds of many peoples, and rightly so. This, perhaps, is particularly true of disarmament. The Wilsonian idea of making the world safe for democracy by international agreement on arms limitation and nonaggression received a severe blow when Germany marched, not only through Belgium but Holland and other countries as well, in its Blitz-Krieg, but with armament which had certainly not been envisaged by the international planners in early post World War I days. Pearl Harbor was, of course, on the same order. International agreements and treaties seemed to be about as worthless as the "scrap of paper" had seemed to the Kaiser's diplomats and generals in 1914. Faith and mutual respect so essential to any (Continued on page 32)

Expanding Frontiers of Science And the World of Electronics

By George Edgar, *Carl M. Loeb, Rhoades & Co., New York City*

Security analyst surveys limitless investment opportunities in science as distinguished from, but including, electronics. He favors companies, preferably small ones and some large ones, in the area of applied science and on the frontier of discovery and application whose revenues in large part come from their technological advances. Knowledgeable in financing new companies, Mr. Edgar opines that classical investment rules do not apply in this area; specifies criteria for selection; enumerates technologies considered attractive; and names typical companies to illustrate meaningful investment exposure.

Most investors realize that science is the new industrial frontier of our nation because it sustains our most dynamic and insatiable needs — automation, convenience, health, communication, and defense. They have seen expenditures for research and product development explode from $1 billion annually in 1945 to $10 billion last year, not including some $15 billion spent cumulatively on atomic bombs and nuclear energy.

George Edgar

They have watched personal fortunes being made in such stocks as Polaroid, Texas Instruments, Varian Associates and Ampex. And they sense, correctly I believe, that personal fortunes will continue to be made in lucky or smart stock selections among science stocks, as they were in the equities of previous industrial frontiers, during their formative years, such as oils, railroads, steels, motors and so on.

In view of the powerful impetus to science of the defense program, it is surprising that the possibility of disarmament does not suppress a growing suspicion that true science stocks are in a vigorous, long term bull market whose upward slope could not be reversed by peace itself.

This daring idea recognizes the fact that competition between Russia and America is essentially technical. It gains further support from the belief that even if insuperable political problems were overcome, not the least of which is China, and a fool-proof armistice were concluded, then:

(1) A tremendous market will develop for the technical equipment necessary to police the peace, including reconnaissance satellites.

(2) The ideological battle with Russia will continue, but its character will shift to industrial and consumer achievements. On this technological battlefield the "high ground" will be the moon, then Mars, with the result that we probably will spend more money in pursuit of the galaxies than we ever did for ballistic missiles.

(3) Harvard's great economist, the late Joseph A. Schumpeter, said that capitalism is doomed unless it develops "creative destruction" in the form of a steady flow of discovery that subjects our country's capital investment to continual obsolescence. This creative destruction has grown out of the very magnitude of our reserach budgets. Once born, creative destruction, fortunately, is a vicious cycle that will thrive in peace as it does in the cold war.

Exactly what is science in the stock market? How can we invest in a field we don't understand whose occult language trys even the imagination of science-fiction writers, while hundreds of companies and its thousands of different products seem to threaten each other constantly with the sudden annihilation of obsolescence? For the person who wants to invest successfully in science, trusting less to luck and more to understanding, I propose a new, systematic formula that begins with the startling idea (Continued on page 30)

ELECTRONICS INDUSTRY FEATURED TODAY

The Security I Like Best . . .

A continuous forum in which, each week, a different group of experts in the investment and advisory field from all sections of the country participate and give their reasons for favoring a particular security.

This Week's Forum Participants and Their Selections

National Vulcanized Fibre Co.—Merritt F. Beal, Analyst, Peter P. McDermott & Co., New York City. (Page 2)

Kerr-McGee Oil Industries—Bernard Feshbach, Registered Representative, Irving Lundborg & Co., Menlo Park, Calif. (Page 2)

MERRITT F. BEAL
Analyst, Peter P. McDermott & Co.
New York City
Members: New York Stock Exchange, American Stock Exchange and Chicago Board of Trade

National Vulcanized Fibre

Because of the large amount of funds seeking good investments, the list is being combed thoroughly in search for bargains, and, believe me, they are hard to find. To find an issue engaged in growing industries, with a splendid past record, modest capitalization, strong finances, liberal dividends and excellent market possibilities, is no easy task. It is my opinion that National Vulcanized Fibre is one such issue and in it I believe I recognize an undervalued situation.


Merritt F. Beal

The company is the leading domestic manufacturer of vulcanized fibre and its principal trade name is Phenolite. As an insulation for the electrical and electronic industries, this product is, in its various forms, of great importance to National and other manufacturers, and, through it, direct and indirect association with the fastest growing industries is well established.

Aside from its plastics business, which keeps it in constant contact with the electrical, radio, automobile, railroad, telephone and aircraft industries, it manufactures bobbins and spools and laminated plastic parts for the textile industry. Through ownership of the Parsons Paper Company, producer of high grade bond, ledger and index bristol papers and paper specialties, it is participating in the consistent growth of the paper industry, and is expanding into other paper products. Parsons was acquired in the early part of 1959 and has proven, and undoubtedly will continue to prove, a very valuable addition to National's business.

The company's long-term debt (bank loan) amounts to $1,550,000 at a rate of 3¾%, and is being paid off rapidly. Following this small obligation, the company has outstanding 662,967 shares of common stock which, comparatively, is a very small capitalization.

Over the years, National's gross sales have been fairly steady and have averaged around $20 million annually but there was a breakout on the upside in 1959 which carried earnings to $24,160,000 and the net income was above $1,840,000, which figures down to $2.78 per share. The gross profit account has shown a consistently annual improvement since 1948 and the book value has advanced with almost the same consistency. At the end of 1959 the book value per share was $21.61, highest in the company's records. The gross property plant and equipment approximated $11,605,000 and depreciation charges against 1959 income amounted to $863,090.

Dividends during the five years through 1958 averaged 65% of earnings and on this basis it could reasonably be expected that payments in the future should be substantially larger than they were in 1959. The most recent indication of more liberality on the part of the directors was an extra of 10c besides the regular 25c quarterly distribution of Feb 15, 1960. Directors meet for dividend action again about April 29 and there appear to be ample reasons for anticipating the establishment of a higher rate or the continuation of extras. Cash dividends, at varying rates, have been continued without interruption since 1946.

The financial position of the company as of Jan. 3, 1960 showed assets above $11 million and current liabilities of about $2,260,000 and with working capital of $8,809.469, a sound fiscal background.

The growth potentialities of this company center to a considerable extent around its research activities which are extensive and continuous. In July, 1959, it formed the "Growth Products Division" through which it will exploit new products and search for other acquisitions and merger prospects. The company at last reports turned out 85 Phenolite laminates, three different thermoplastics, 16 grades of vulcanized fibre and 10 grades of printed circuits. There is practically no limit to the possible expansion of similar articles which are in growing demand because of the exceptional qualities of the basic products made by this organization.

In view of the close association of the company with rapidly growing industries — electrical, electronic and paper its comparatively small capitalization, financial stability, large earnings and past record of dividend liberality, the stock should, in my opinion, sell to a minimum of 10 times earnings on the New York Stock Exchange where it is listed.

BERNARD FESHBACH
Registered Representative
Irving Lundborg & Co.
Menlo Park, Calif.

Kerr-McGee Oil Industries

Buying securities has some of the aspects of entering a popularity contest—and there is considerable satisfaction (and profit) in investing in an ugly duckling that turns into a beauty queen. In today's stock market Kerr-McGee Oil Industries certainly falls into the ugly duckling class. It is my belief that it will turn into a beauty queen. This belief is based on renewed investor recognition of demonstrated capable management. Also, heavy and effective capital spending of the past few years, which has embraced the energy field rather than just the oil industry, is beginning to bear fruit. With a firm earnings base that is not dependent on oil products and anticipated net earnings (by the writer) of $3.25 to $3.50 per share for fiscal 1960, up from $2.13 in 1959, Kerr-McGee Oil Industries' shares should become front runners in the stock market's popularity contest.


Bernard Feshbach

The company is an outgrowth of Anderson-Kerr, drilling contractors organized in 1926 to drill in Oklahoma. In 1935 Anderson decided to retire and Dean A. McGee, then as now regarded as one of the outstanding oil geologists, left Phillips Petroleum to become Kerr's partner. Since 1942, when Mr. Kerr was elected Governor of Oklahoma, Mr. McGee has been, to all practical purposes, running the company.

In the early 1950's the company entered into an aggressive expansion program in all phases (excepting petro-chemicals) of the oil industry and also into a program of participating in additional facets of the energy needs of this country. It also started to move out of the normal type contract drilling and became a specialist in deeper and more difficult drilling operations.

Recent receipt of a contract to drill 500 wells for the Government of Argentina plus another contract from an American group to drill up to 300 additional wells in the same country should be regarded as recognition of KMG's position in this field. Contract drilling accounts for a substantial portion of the company's net income and is the field where it is recognized as a leader and pioneer. The company was the driller of the first off-shore well in unprotected Gulf of Mexico waters and was a pioneer in both the design and use of small, fixed platforms.

In the oil and gas production phase of its operations the company has increased its crude oil production to its net interest by 87% since 1953 with an additional 35% gain projected for 1960. Venezuelan oil production will be chiefly responsible for this year's gain. KMG owns a 5.3957% interest in four Venezuelan concessions where Phillips Petroleum is the operator. The company was one of the first to go into off-shore Louisiana exploration and is continuing its activities in that region. Competent outside sources estimate the company's oil reserves in the U. S. A. at 29,000,000 barrels of crude and 18,000,000 barrels of crude in Venezuela.

In the natural gas area production has increased 78% since 1953 with an additional 10% gain projected for the current fiscal year. Since increased sales have gone hand in hand with higher prices, this year's 10% increase in natural gas sales will produce a 15% increase in income from this source. In addition, a contract for natural gas sales to be delivered out of Canadian reserves was recently consummated with deliveries to begin in October of 1960. However, this contract will not make any substantial contribution to earnings. Natural gas reserves, estimated at 1.4 trillion cubic feet, are mainly in the U. S. A. with some in Canada.

KMG's manufacturing and marketing programs represent an interesting study in management foresight and aggressiveness. In 1953 the company had a refining capacity of 9,000 barrels per day (now about 43,000 barrels per day) and no retail marketing outlets. It was principally a marketer of asphalt and specialty products.

Continued on page 35

(This is under no circumstances to be construed as an offer to sell, or as a solicitation of an offer to buy, any security referred to herein.)

Growth of Electronics

By Dr. E. M. Baldwin, Vice-President and General Manager of Rheem Semiconductor Corp., New York City*

Dr. Baldwin's brief analysis of electronic components' growth credits transistors' sales as being phenomenal, but observes that the less glamorous semiconductors and rectifiers are quite noteworthy.

The giant electronics industry of today springs from the invention of the vacuum tube triode by deForest in 1906. It had its childhood in the early Twenties and grew by leaps and bounds with the advent of the radio. Today it is the fifth largest manufacturing industry in the United States. During 1959 the industry established a new sales record of over $9.2 billion, up from $7.9 billion the previous year.

This industry is based on the science of electrical conduction through a gas, a vacuum, or a solid. It makes and uses electron tubes, semiconductors, and other components in which electrons are emitted, controlled, and directed.

The size and growth of electronics manufacturing is shown by analyzing its four market areas: consumer, components replacement, industrial and military. Each of these has grown steadily since its birth.

Swift Rise of Electronics

Consumer products rose to $2.1 billion in 1959 and components replacements to $1.1 billion.

The industrial market has more than doubled in the last five years and now represents about 20% of the industry.

Military products account for about 50% of the total industry sales, and have reached $4.5 billion. Of this market, the missile market is the largest. The total procurement for the missile programs has expanded from $700 million in 1955 to over $3 billion in 1959, with nearly $4 billion projected for 1960. The electronic portion of missiles has increased from $300 million in 1955 to over $1.5 billion in 1959, and should exceed $2 billion in 1960.

The swift rise of employment in electronics reflects the industry's dynamic growth. Between 1947 and 1956 employment more than doubled, to approach 625,000 workers. Today there are more than 700,000 persons employed in electronics manufacturing. Of this total nearly 100,000 are engineers, 500,000 are production workers, and about 110,000 are executive and salaried employees. Although electronic plants are located in every state, nearly 70% of the total manufacturing employment is concentrated in New York, Pennsylvania, New Jersey, Massachusetts, Illinois and California. Total employment is not expected to increase as fast as sales during 1960 because of increased process mechanization, design simplification, standardization of parts and construction, and plant modernization. However, recent emphasis on research and development in magnetics, molecular electronics and solid state phenomena, plus the greater application of scientific principles to production, has increased the demand for engineers, scientists and technicians.

Sales growth of the transistor, currently the most glamorous of all electronic components, has been phenomenal. This solid state device has replaced many vacuum tubes and electron tubes for amplification, signal generation and rapid switching operations. Invented at the Bell Laboratories in 1948 by Doctors Bardeen, Brattain and Shockley, the transistor was first made in significant quantities in 1953 with a volume of about 600,000 units. During 1959 the industry sold approximately 85 million transistors valued at $225 million. The compactness, reliability, and low power requirements are responsible for the diverse applications of transistors—applications that range from transistorized toys and hearing aids to instrumentation in missiles.

Although less spectacular than transistor sales, the sales of semiconductor diodes and rectifiers are quite noteworthy. Sales of these devices reached $120 million in 1959. These semiconductors are used as detectors or rectifiers, or as regulators and switching devices.

*From a talk by Dr. Baldwin at the dedication of his firm's new $2,000,000 plant at Mountain View, Calif.

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Regular Features

NSTA NOTES

SECURITY TRADERS ASSOCIATION OF NEW YORK

Final preparations are being made for the 24th Annual STANY Dinner and Reception to be held at the Waldorf-Astoria Hotel, Friday evening, April 29, 1960.

Lewis H. Serlen of Josephthal & Co., Chairman of Arrangements, indicates that this year's affair will be the largest in point of attendance of any ever held, and responses from invited out-of-town guests is running 50% higher than any previous year.

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Texas Industries, Inc.— Profits in Concrete

By Dr. Ira U. Cobleigh, *Enterprise Economist*

An appraisal of the progress and profitability of this well managed Southwest producer of concrete products

Time was when the concrete industry was all spread out. Some companies produced cement, others sand, gravel and crushed stone, others sold cement and ready-mixed concrete, and still others manufactured concrete blocks, piping or conduits, or precast forms. Now the trend is all toward verticality — to combine, within a single corporate enterprise, production of the cement and aggregates, delivery of ready mixed concrete, and manufacture of the end products such as prestressed concrete beams. An excellent and money-making example of this trend toward corporate verticality is Texas Industries, Inc.

This is a rapidly expanding company in a rapidly expanding section of the country. Principal territory served is in Texas and Louisiana, with most of the ready-mix concrete delivered within a 50-mile radius of Dallas and Fort Worth, and in and around New Orleans and Alexandria, La. Velocity of growth is indicated by climbing sales — from $217,000 in 1950 (company fiscal year ends May 31) to $17.9 million for 1959.

New Kind of Aggregate

Texas Industries, Inc., has its own sand and stone quarries. Sand and gravel mixed with Portland cement and water create a grey paste which, after being churned about in ready-mix trucks with their whirling tanks, is poured into forms, sets and becomes concrete, hard and permanent as granite. Because sand and stone are heavy aggregates and increase importantly the structural weight of buildings, factories, etc., there has been a constant research for lighter aggregates. Texas Industries has come forward with a splendid one called Haydite. This is produced by burning certain types of shales and clay in rotary kilns until they are fused into clinker. This clinker is then crushed to appropriate sizes and used in place of sand and stone to make lightweight concrete and precast beams, girders and forms. The result is a concrete about 40% lighter than the traditional variety. Haydite aggregate was used in the Statler-Hilton in Dallas, the Continental Oil Building in Houston, and was specified for the new $24 million Federal Government Office Building in Dallas — the largest lightweight concrete building in the world. Texas Industries not only uses Haydite in its own concrete but sells the aggregate separately, over a wide area. (There's a new Haydite, recently developed, that is even lighter by 25%.)

Balanced Business Operations

Texas Industries has a rather well balanced business, with 38% of sales from ready-to-pour concrete, 25% from masonry products, 12% from precast and prestressed girders, beams, floor sections, etc. (made in an ultra modern new plant), 11% from aggregates, and 14% from pipe, building products and Sakrete.

New Low Cost Cement Plant

There's an exciting new development in the Texas Industries picture that promises to add new dimensions to corporate earning power. By the end of 1960, the company will have its brand new, 1,400,000 barrel annual capacity cement plant completed at Midlothian, Texas (about halfway between Dallas and Fort Worth). This is a most important property addition since Texas Industries has been spending over $3 million a year on the purchase of cement. About 70% of the output of the new plant will be required for Texas Industries' own needs; the balance of output can be sold locally. Texas has been a consistent importer of cement and there is, therefore, an excellent native demand.

Three features about the new cement plant stand out. First, the plant is almost ideally located. In the cement business a major cost factor is usually transportation. This plant is located close to its major markets in Fort Worth and Dallas which reduces transport costs to a minimum.

Secondly, this cement mill is being built at a most attractive price. It is more or less standard to assume the current cost of a new cement mill at about $10 per barrel of capacity. On this basis a 1.4 million barrel mill would cost about $14 million; yet the estimated cost of the Midlothian mill has been indicated at around $8 million. And it has reserves of raw materials to supply the plant for 300 years.

Thirdly, cement manufacturing is a highly profitable business. Not only will Texas Industries supply all of its own need from output of the new plant, but it will make sizeable profits on the operation. Something of a parallel exists in the case of Colonial Sand and Stone Co. in New York. It had been a large buyer of cement (over 3 million barrels a year). In 1958, it built its own two million barrel capacity mill at Kingston, N. Y., and within two years time increased its net earnings by more than 40%. We should expect results somewhat along those lines in the case of Texas Industries.

Sustained Growth

In its rapid growth Texas Industries has made a number of company acquisitions. Some of these worked out well, and some either didn't seem to fit into the picture or failed to produce sufficient profit. Gradual disposition of these unrelated or marginal operations has implemented the present over-all policy of concentrating within the concrete products' field. The company's only major "outside" investment is a 10% interest in Southwestern Financial Corporation, in the business of leasing equipment and the providing of financing in special situations.

Texas Industries appears favorably situated in an industry growing at the rate of about 6½% a year, and in a territory growing in population and production much faster than the national rates in these categories. As a further boost to the company's future earnings there is not only the cement mill profitability but aggressive forward motion in the field of prestressed concrete. The national production of prestressed concrete for highway (especially bridges) and industrial use increased by over 300% in the 1954-59 period. Texas Industries with its new Structural plant in Dallas is uniquely equipped to capitalize on this trend.

Other new products of T I include Mo-Sai curtain wall architectural panels, the Trusdeck roof system, cold asphalt mix Sakrete for do-it-yourself repair jobs, and new prestressed Double-Tee roof and floor sections.

The stage now appears set for interesting conversion of all these divisions of Texas Industries into rising profitability. Earnings on invested capital were not particularly impressive a couple of years ago. They have a better look today. For the last reported year, ended May 31, 1959, net income was $1,294,706 against $754,080 for 1958; and the figures for fiscal 1960 are expected to extend this uptrend in earnings.

All of which brings us down to a consideration of Texas Industries common stock. There are 1,213,955 common shares outstanding preceded by 8,750 shares of $100 par preferred and $5,416,000 in long-term debt. In addition, last August the company borrowed $6.5 million to finance construction of the cement plant. Of the long debt, $5,142,000 is in 4.60% debentures, convertible (to the extent of the first $1½ million converted) into common at $13.72 per share. These debentures sell at 80 and the common at 8¾ over-the-counter, paying currently a 30 cents dividend.

Per share net was $1.03 for fiscal 1959 (including 41 cents a share in capital gain on investment sale). For this year, we would expect operating net of perhaps 70 cents a share moving ahead to about $1.30 in fiscal 1961, and to considerably higher levels the following year.

Of course, Texas Industries is dependent upon the business volume in the construction industry. But assuming the continuance of burgeoning expansion in Texas and Louisiana, this company is favorably placed to deliver what stockholders have ever liked—higher earnings and higher dividends.

The State of TRADE and INDUSTRY

Steel Production
Electric Output
Carloadings
Retail Trade
Food Price Index
Auto Production
Business Failures
Commodity Price Index

Bank Clearings 1.6% Above Same Week a Year Ago

Bank clearings this week will show an increase compared with a year ago. Preliminary figures compiled by us, based on telegraphic advices from the chief cities of the country, indicate that for the week ended Saturday, April 16, clearings from all cities of the United States from which it is possible to obtain weekly clearings will be 1.6% above those for the corresponding week last year. Our preliminary totals stand at $26,958,744,649 against $26,535,140,823 for the same week in 1959. Our comparative summary for some of the principal money centers for week ended April 16 follows:

Week Ended April 16—	000 Omitted 1960	1959	%
New York	$15,339,990	$13,590,467	+12.9
Chicago	1,044,799	1,372,055	—23.9
Philadelphia	865,000	1,161,000	—25.5
Boston	787,322	783,059	+ 0.5

Cites Changed Economic Outlook For Steel Industry

The shape as well as the size of the year seems to have changed for the steel industry. Shipments will be smaller than anticipated. But they will be better balanced between the first and second half, says "The Iron Age," national metalworking weekly.

Originally, the first half was supposed to be strong. And a steady tapering off was expected in the second half. Now the steel industry is witnessing a leveling off in volume of shipments, backlogs and new orders, the magazine notes.

Hand-to-mouth buying in steel has been present for the past two or three weeks. This trend will become widespread in the industry as steel backlogs vanish, and as steel shipments get in line with new orders and steel consumption.

"Iron Age" says the consumption-order balance will become apparent within the next month or two. While the volume of incoming orders is close to bottom, cancellations have hit bottom.

An order improvement seems certain in the near future, but inventory building has ended. The improvement will be a statistical upturn, not a basic trend. Incoming orders will reflect actual steel consumption more than at any time in the recent past.

Some large rush orders can be expected from automakers, but not due to the seasonal spurt in car sales. Automakers already have enough steel on hand or on order to take care of present model runs. New orders will be for steel to balance inventories.

But, barring a recession, there could be a revival in the fall. Steel users will enter the last half of the year with balanced but low inventories. No increase in consumption can be expected during the summer because of seasonal factors and vacation schedules.

However, a successful pickup in the fall would have to be accompanied by inventory building. For this reason, "The Iron Age" reports, many steel marketing men predict a fourth quarter operating rate ranging from 75% to 85%.

Others, however, favor the lower figure. They point out that steel is currently being consumed at the equivalent of 70% to 75% of capacity. At this rate inventory can be added without the mills going over 80% of capacity.

Expects Steel Product Demand To Increase by July

Demand for major steel products — sheets, bars, and plates — will show an upturn no later than July, "Steel" the metalworking weekly, reports. The worst of the stretchouts, cutbacks, and cancellations are over.

The operating rate could fall to 75% of capacity or slightly lower before the summer months, but steel industry leaders are still confident they'll turn out better than 120 million tons of steel ingots this year to top the 1955 record. This will take an average ingot rate of 80%.

The next two months will be relatively lean from a new order standpoint. The turning point will come in July when automakers start their buildups for 1961 models. They probably have enough steel in stock or on order to round out production of 1960 models.

The Easter holidays, a wildcat strike, and planned cutbacks dealt steel production a sharp blow last week. The ingot rate fell 4.4 points to 79.9% of capacity. Output: 2,277,000 ingot tons.

Scrap is holding, but the market is slow. "Steel's" price composite on the bellweather grade, prime heavy melting, was at $33.66 a gross ton for the third week.

U. S. nonferrous producers are finding research is paying off by opening new markets, "Steel" reported.

Aluminum is set to launch a major attack on the can market.

Continued on page 34

OBSERVATIONS...

BY A. WILFRED MAY

"PROFITABLE" PAPER-CUTTING

Most discouraging to the promoters of realism in the investment area, are the persisting fictions in regard to change in capitalization resulting in alteration in the value of each stock certificate and/or the investor's total holding. Along with the stock *split*, and also the holding company, the stock *right* is in the forefront of illusion.

Misunderstanding there is probably accentuated by ambiguity in the term "right," with all-too-many stockholders enthusing over the rights offering "privilege" under the impression that it gives them a profitable investing "break," or that it is, perhaps, a kind of extra "dividend."

Unfortunately, confusion in this area is not confined to the amateur. A story on the subject currently promulgated by a publication affiliated with one of the stock exchanges, along with its usual content of informed and constructive information, appears likely to cause misunderstanding. Captioned "RIGHTS FINANCING PROFITABLE," it continues with this statement: "All but one of the 22 common stocks involved in rights offerings on the New York Stock Exchange last year closed 1959 above the prices at which additional shares were offered. On the up side, Ampex Corp. was selling at better than double its rights offerings price by the close of 1959—$107.25 against $52.50 per share."

Obligation Entailed

Actually, as is demonstrable by simple arithmetic, far from providing a bonus or "profit," the rights routine frequently entails the shareholder's *obligation* to subscribe to avoid *dilution*.

In any event, surely the permanence of the price of the total outstanding shares above the subscription price has no relation to profit, and is without significance. Otherwise, the result would be that the lower the subscription price is fixed by management (with an increase of the dilution factor), the greater the profit—an obvious absurdity.

Typically, in the Ampex offering which is cited, the subscription price of the new shares, set at $52.50 compared with a concurrent market price of 78 for the outstanding shares, and with the low of the year at the 61 level.

This statement by an investment authority, Frederick W. Page of the Tri-Continental Fund Group (before the Oklahoma Utilities Association, March 28, 1957): "Those who subscribe may be better off than those who do not or cannot subscribe; but actually it is the transfer agent, the printer, and the underwriter who get the most benefit from a rights offering," may be unfair. Likewise exaggerating may be an article in a financial magazine, captioned "MORE MONEY, PLEASE—How do you put the bite on stockholders for more money and make them like it? Pre-emptive rights offerings, management has found, make a kind of sugar-coating." (*Forbes*, April 1, 1957.)

No blanket conclusion is warranted specifying either dilution or accretion to result from all rights offerings. Either result depends on the relation between the market price of the outstanding shares to their book value, and on whether the rights are exercised or sold.

The Alternate Results

In a "premium" situation, that is, where the outstanding shares are selling for more than their book value, the shareholder gains if he sells his rights; comes out even if he subscribes.

However, in a "discount" situation, that is, where the outstanding shares are selling below the book value of the equity, the shareholder must subscribe to protect himself from dilution.

This latter-instanced overhanging dilution can be clearly noted in the case of the closed-end investment company selling at a discount from asset value which is easily calculated with mathematical precision. The value, and sale, of the rights cover only the difference between the subscription price and the market discount price, and not the difference between the higher asset value and the market price. The latter differential entails the dilution if the rights are sold. Only when the outstanding shares are selling even with, or at a premium over, asset value, is rights selling profitable.

Thus, it may be concluded that in many instances in the industrial, utilities, and investment companies fields, far from being a boon, rights offerings constitute an *assessment!*

* * *

DISSENT FROM DOW-LAND

Our incoming Dow Theory mail includes the following communication:

My dear Mr. May:

I have been so often in full agreement with you that I have greatly hesitated to write this note. But your article of Thursday, March 24 entitled, under Observations, "Jammed Signals in that Numbers Game," is rather rough comment on Dow's great theory, as further elucidated by William Peter Hamilton and Robert Rhea, and now perhaps by "the High Priest," Mr. Richard Russell.

A Small Coterie

In correspondence with Mr. Russell, I asked if there were as many as 300 Dow Theorists today. His reply indicated that I was too high at 300. I am sure that the number is not more than 300, because the action of the market shows that had there been more than that number — running as you suggest into the thousands— the market would have collapsed recently and now be approaching zero in the Dow averages.

Now I flatter myself that I am among the blessed in knowing the Dow theory, and make bold to comment on what I think are your misconceptions of the theory, and I'll explain three things which I think are not clear to you. These are not my opinions but are the clear statements of both Hamilton and Rhea.

(1) All bull markets occur in three separate and distinct phases or legs. This is a point that the false Dow Theorists seem utterly unable to grasp.

Now I can imagine that your first reaction will be that I'm merely showing an historical situation. However, Hamilton died in 1929, and Rhea about 1940 and neither of them could have foreseen this recent bull market, yet they both stressed that every bull market had three separate and distinct phases. Now some critics of the Dow theory insist that the Dow theory failed in both '53 and '57 in that a bear signal was given both those times. But under the Dow Theory, the '53 decline merely marked the end of the first leg while the '57 decline merely marked the end of the second leg. I noticed that while you did not consider the '53 decline a bear market, you did consider the '57 sell-off a bear market.

However, those of us who are Dow theorists were not alarmed by either of these sell-offs. We recognized them for what they were. Yet the idea of three phases, though repeatedly stated by both Hamilton and Rhea, seems impossible to get across to anyone. Practically it's impossible to teach such a simple thing as these three phases, in spite of the emphasis that Hamilton and Rhea put on this.

Now if you had understood the Dow theory, you would certainly not have called the '57 sell-off a bear market but would have recognized it for just what it was.

"Signal" vs. "Confirmation"

(2) There seems to be a fundamental misconception between a Dow theory Signal which is one thing, and the "confirmation" of that signal. The sell signal was given throughout July and August of 1959. I sold all my stocks at the first time I'd sold anything, on September 2 and 3. Everything went down the drain, because the Dow theory gave the selling signal then. Now to confirm that signal, the confirmation occurred as you correctly state on March 3 of this year. It was merely confirmation of the signal that came mainly in August of 1959.

The signal and the confirmation of the signal are two separate things, but that simple fact seems impossible to get across. Like a child born into a Catholic family, he's a Catholic from the day he is born. Later on, after instructions, he is confirmed into his church. Certainly the child's birth and his confirmation are not the same thing.

Must Beat the "Confirmation-Gun"

You have quite a table appended to illustrate your comments, but I have wondered if you understood the difference between the signal and its confirmation. Your table shows what would have happened between the two sets of confirmations and I imagine that your results are correct, but the Dow theorist would not have waited that long either to buy or to sell. He would have bought on the buy signal and sold on the sell signal and would not have waited until these confirmations occur, though he is glad to see these confirmations.

(3) Now the question will arise as to what a sell signal is. To explain this thing, it will be necessary to use the Dow theory. As you seem to be well aware, the whole basis of the Dow theory is based on the action of the two averages, and nothing else. Under the Dow Theory, the two averages must do the same thing. This you also call confirmation. We Dow theorists believe that as long as the two averages zig and zag together, the trend thus established will continue, either on the up or down side. They must zig together and zag together or as we'll call it, they must "be in Gear."

This idea of confirmation is the whole story of the Dow theory and other things are merely commentary on the theory. Mr. Rhea stated in his book that "confirmation of the two averages is by far the most important thing in the theory," and he further states "it must not be forgotten for even one day." Now I imagine you've got in your desk copies of the two averages as they were acting in August 1959. They went out of gear. While the DJIA went into new high ground, the DJRA went into reverse, and so for a period of several weeks, the rails persistently refused to go up.

This lack of confirmation signaled a change in trend was at hand. Now since this occurred in the THIRD and final leg of a very long bull market, this was a sell signal. The same formation occurred in both '53 and '57 but since it was not the third and final leg of the bull market, the Dow theorist did not sell. We were not alarmed, though the formation between the two averages was almost exactly similar to the August situation. On September 2nd and 3rd, I sold everything.

However, as my wife and I have nothing but stocks and a scattering of bonds, we could not afford to have our capital destroyed by a bear market such as 1929 which would wipe us out. I'm 71 and simply have to play it safe. At the beginning of this year we both had very queasy

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TAX-EXEMPT BOND MARKET

BY DONALD D. MACKEY

In a quiet market setting, the $100,000,000 Triborough Bridge and Tunnel Authority issue was successfully underwritten by Dillon, Read & Co.-White, Weld & Co.-W. H. Morton & Co.-Allen & Co. and their nationwide associates. This offering consisted of $74,000,000 4% term bonds maturing 1985 and priced at 100, and $26,000,000 serial bonds, due from 1970 through 1975, priced variously from 3½% at 100 to 3¾% at 100. With substantial dealer bank subscription the issue sold well, particularly in the New York area.

This offering is the first issue of the "Narrows" Bridge financing, which will total at least $325,000,000 before being completed. Although a construction project, the Narrows Bridge bonds should be very well secured by the various other substantial revenue producing facilities of the Authority. When the Triborough's presently outstanding debt is paid off in 1969, it is estimated that net earnings from its presently operating facilities would provide sufficient revenue to cover the debt service on the Narrows Bridge bonds. Because of the considerable security involved in this situation, the Authority procured a very good price for its bonds and investors seemed well pleased. The current market for 4% bonds due 1985 is 99¾-100.

Californias Going Well

This week's calendar was further activated by the offering of $25,000,000 State of California (1962-1986) school bonds. Breaking with its recently established precedent of marketing issues of from $50,000,000 to $100,000,000 every three months, the State sought to reduce borrowing costs by more opportunistic offerings.

Although not generally anticipated because of the quiet and apparently trendless current market situation, the State did rather well with Tuesday's offering. With bidding highly competitive, the Bank of America-First National City Bank of New York-Chase Manhattan Bank and Blyth & Co. group won out with a 3.835% interest cost bid. The Bankers Trust Co.-First National Bank of Chicago-Halsey, Stuart & Co. group bid represented a 3.874% interest cost to the State. The high bidders reoffered the bonds priced out to 101½ for 4% bonds due 1985 and 1986.

Although there was no report as to sales as we went to press, the issue appears to be attracting considerable investor interest and a successful placement of these bonds seems assured.

Other Current Awards

The City of Pensacola, Florida awarded last Monday $7,500,000 (1961-1990) excise tax and revenue bonds to the Ira Haupt & Co.-Allen & Co.-John Nuveen & Co. and Merrill Lynch, Pierce, Fenner & Smith group. Yields run from 2.90% to 4.35% and an excellent investor reception is reported with a balance of only $310,000 as of yesterday.

Pima County, Arizona School District (Tucson) awarded, also on Monday, $4,900,000 (1961-1980) bonds to a group headed by Halsey, Stuart & Co.-Lehman Brothers and Smith, Barney & Co. Yields run from 2.75% to 3.75%. The balance as reported is $3,400,000.

On Tuesday, Montgomery County, Maryland sold $7,500,000 general obligation bonds (1961-1980) to a group headed by the Chase Manhattan Bank and including the Bankers Trust Co.-C. J. Devine & Co. and others, at an interest cost of 3.963%. The reoffering scale ran from 2.60% to 3.75%. The issue is reported as being half distributed.

Another California issue, $2,937,000 Whittier High School Bonds, was purchased on Tuesday by the Bank of America group. Maturing from 1961-1980, the scale ran from 2.75% to 3.80%. In this instance, a school district issue of lesser investment rating is offered at a higher level than California state obligations. Relative scarcity is a considerable market asset at times.

The City of Philadelphia $29,260,000 general obligation (1961-1990) bonds, offered Wednesday, were taken by a merged group of dealers and dealer banks headed by First National City Bank, Lehman Brothers-Halsey, Stuart & Co.-Blyth & Co. and their associates. Scaled to yield from 2.40% to 3.875%, no data as to investor response were available at this writing.

The *Commercial and Financial Chronicle's* Index for high grade bonds increased slightly during the past week. It was 3.45% yesterday (April 20) as against 3.433% a week ago. This indicates an average market loss of about one-quarter of a point. Although the market has been slightly easier, there is an indication of a firmer trend. Bidding for new issues continues to be aggressive and, although most of the recent new issues have not been immediate sellouts, sales performances have been relatively good.

The dollar-quoted municipal revenue issues continue to do quite well. The Smith, Barney Turnpike Bond Index was 3.96% on April 13. The reports indicate steadily improving revenues for most projects. The Easter weekend evidenced a turn for generally better traffic and revenues, after particularly severe March weather conditions. However, despite climatic adversity, most of the Turnpikes and Bridges did better in March this year than a year ago.

The Florida Turnpike Extension seems likely to be financed as a separate entity rather than consolidated as a part of the existing Turnpike when the extension is approved. This decision seems entirely appropriate in view of the business-like administration of the Florida Turnpike Authority.

The new issue schedule has attracted many municipalities and states during the past week. The scheduled calendar now totals approximately $650,000,000. Items proposed but not scheduled would bring this total of new financing close to $1 billion within the near future. This is a considerable volume but by no means a record of underwriting for a similar period. The market at present gives no evidence of weakness in facing up to this underwriting task even though investor demand continues less pronounced than earlier in the year.

Substantial New Business Scheduled

Sizable recent additions to the schedule include $7,000,000 Harris County, Texas (Houston); $6,900,000 Oyster Bay and Babylon New York School District No. 22; $9,500,000 Cook County, Illinois; $48,800,000 State of Minnesota; $4,380,000 Dayton, Ohio; $4,850,000 Florida Development Commission; $5,500,000 Suffolk, County, New York Water Authority; $6,000,000 Colorado Springs, Colorado Utility Revenue; $9,000,000 Phoenix, Arizona, Water; $19,325,000 Detroit, Michigan, Various, and $9,000,000 Norfolk, Virginia. All of these issues are to be offered at competitive bidding.

An important negotiated type issue may come to market within the next 90 days. The $200,000,000 Chesapeake Bay Bridge and Tunnel District is reconsidering its proposed financing and engineering studies are being currently brought up to date in an effort to underwrite this important project connecting Cape Henry with Cape Charles. The underwriting group is headed by First Boston Corporation-Allen & Company-Merrill Lynch, Pierce, Fenner & Smith-Willis Kenny & Ayres, Inc.

Inventory Higher

The "Blue List" total of state and municipal bonds has expanded moderately since last week. Whereas this figure was $292,885,500 on April 13, it is now $310,011,500. With this week's heavy new issue volume, further expansion seems likely at the present time. We point this up not as a currently negative factor but as an indication of the possible secondary market problem ahead. With bank credit still considerably easier than had earlier been anticipated, and with a consequent desire on the part of the dealer banks to utilize this credit in a desirable combination of underwriting and investing, the market for tax-exempts seems not seriously vulnerable at present.

MARKET ON REPRESENTATIVE SERIAL ISSUES

	Rate	Maturity	Bid	Asked
California (State)	3½%	1978-1980	3.95%	3.80%
Connecticut (State)	3¾%	1980-1982	3.50%	3.35%
New Jersey Highway Auth., Gtd.	3%	1978-1980	3.45%	3.30%
New York (State)	3%	1978-1979	3.35%	3.20%
Pennsylvania (State)	3⅜%	1974-1975	3.25%	3.10%
Vermont (State)	3⅛%	1978-1979	3.25%	3.10%
New Housing Auth. (N. Y., N. Y.)	3½%	1977-1980	3.50%	3.35%
Los Angeles, Calif.	3¾%	1978-1980	3.90%	3.75%
Baltimore, Md.	3¼%	1980	3.65%	3.50%
Cincinnati, Ohio	3½%	1980	3.40%	3.25%
New Orleans, La.	3¼%	1979	3.80%	3.65%
Chicago, Ill.	3¼%	1977	3.85%	3.70%
New York City, N. Y.	3%	1980	3.90%	3.80%

April 20, 1960 Index=3.450%

Larger Issues Scheduled For Sale

In the following tabulations we list the bond issues of $1,000,000 or more for which specific sale dates have been set.

Information, where available, includes name of borrower, amount of issue, maturity scale, and hour at which bids will be opened.

April 21 (Thursday)			
Cedar Rapids Comm. S. D., Iowa	4,990,000	1962-1979	10:00 a.m.
Fulton County, Georgia	9,600,000	1961-1987	Noon
White Plains School District, N. Y.	8,500,000	1961-1988	Noon
April 25 (Monday)			
Foothill Junior College Dist., Cal.	4,400,000	1961-1983	11:00 a.m.
San Bernardino, California	1,000,000	1961-1990	1:30 p.m.
Shaker Heights, Ohio	1,200,000	1961-1980	12:30 p.m.
April 26 (Tuesday)			
Allentown Authority, Pa.	2,200,000	--------	11:00 a.m.
Babylon Union Free School Dist. No. 7, New York	3,188,000	1961-1989	1:00 p.m.
Ballston, Clifton Park, etc., City School District No. 1, New York	1,750,000	1960-1989	11:00 a.m.
Brownwood Ind. Sch. Dist., Texas	1,000,000	1961-1990	7:30 p.m.
Buncombe County, North Carolina	2,300,000	1961-1979	11:00 a.m.
Cleveland, Ohio	13,275,000	1961-1980	11:00 a.m.
Los Angeles City Sch. Dists., Calif.	16,000,000	1961-1985	9:00 a.m.
Louisville & Jefferson County Metropolitan Sewer Dist., Ky.	8,000,000	1978-2000	11:00 a.m.
North Miami Sch. Bldg. Corp., Ind.	1,250,000	1963-1990	10:00 a.m.
York County, South Carolina	1,000,000	1961-1884	Noon
April 27 (Wednesday)			
Amarillo Independent S. D., Tex.	2,000,000	1961-1973	1:00 p.m.
Frederick County, Maryland	1,500,000	1961-1985	11:00 a.m.
Kansas City, City Sch. Dist., Kan.	3,850,000	1960-1980	11:00 a.m.
New York City, N. Y.	75,000,000	1961-1990	11:00 a.m.
St. Louis Co., Hazlewood Sch. Dist. No. R-1, Missouri	1,400,000	1961-1980	8:00 p.m.
Spokane, Washington	1,000,000	1962-1980	10:00 a.m.
Washington Union Vale Central School District, No. 1, New York	2,100,000	1960-1988	2:00 p.m.
April 28 (Thursday)			
Abilene Ind. School District, Texas	2,000,000	1961-1985	2:00 p.m.
Harris County, Texas	7,000,000	1961-1980	10:30 a.m.
Oyster Bay & Babylon Union Free School District No. 22, New York	6,966,000	1961-1989	11:30 a.m.
Sacramento Municipal Utility District, California	30,000,000	1966-1999	11:00 a.m.
Southgate Community S. D., Mich.	2,100,000	1961-1985	8:00 p.m.
Union City, New Jersey	2,873,000	1961-1985	11:00 a.m.
May 2 (Monday)			
Cascade County S. D. No. 1, Mont.	3,100,000	--------	7:30 p.m.
May 3 (Tuesday)			
Cook County, Illinois	9,500,000	1961-1980	11:00 a.m.
Excelsior Union High School Dist., California	1,165,000	1961-1980	9:00 a.m.
Harper Creek Comm. Sch. Dist., Michigan	1,585,000	1962-1989	8:00 p.m.
Minnesota	48,820,000	1961-1979	10:00 a.m.
Pearl River Valley Water Supply District, Mississippi	8,800,000	1964-1999	10:00 a.m.
Rocky Mount Admin. Unit, North Carolina	1,000,000	1961-1985	11:00 a.m.
Walla Walla County School District No. 140, Washington	1,700,000	1962-1980	10:00 a.m.
May 4 (Wednesday)			
Dumont School District, N. J.	3,000,000	1961-1983	8:00 p.m.
King County, Shoreline Sch. Dist. No. 412, Washington	1,000,000	1962-1975	11:00 a.m.
Public Housing Authorities	133,410,000	--------	--------
May 5 (Thursday)			
Central Contra Costa San. District, California	2,900,000	--------	11:00 a.m.
Dayton, Ohio	4,380,000	1961-1983	Noon
May 6 (Friday)			
Arkansas State Teachers College, Arkansas	1,090,000	1961-2000	10:00 a.m.
May 9 (Monday)			
Florida Development Comm., Fla.	4,850,000	1962-1989	11:00 a.m.
May 10 (Tuesday)			
Jacksonville, Fla.	30,000,000	--------	--------
Newport News, Virginia	3,000,000	1961-1990	2:00 p.m.
Parma, Ohio	3,445,730	1961-1970	1:00 p.m.
Suffolk Co. Water Authority, N. Y.	5,500,000	--------	--------
May 11 (Wednesday)			
Colorado Springs, Colorado	6,000,000	1961-1975	11:00 a.m.
May 17 (Tuesday)			
Bridgeport Comm. Sch. Dist., Mich.	2,200,000	1961-1989	8:00 p.m.
Cincinnati, Ohio	9,515,000	--------	--------
Hot Springs, Arkansas	1,300,000	1963-1990	2:00 p.m.
Lawrence Township School Dist., New Jersey	1,188,000	1962-1981	2:00 p.m.
Phoenix, Arizona	9,000,000	--------	--------
Pittsburgh, Pennsylvania	3,750,000	--------	--------
Terrebonne Parish Con. Sch. Dist. No. 1, Louisiana	1,000,000	1962-1985	10:00 a.m.
May 18 (Wednesday)			
Princess Anne County, Virginia	2,500,000	1962-1985	--------
June 21 (Tuesday)			
Norfolk, Virginia	9,000,000	--------	--------
May 24 (Tuesday)			
Detroit, Michigan	9,325,000	--------	--------
Detroit School District, Mich.	10,000,000	--------	--------
May 25 (Wednesday)			
Bunkie, Louisiana	1,558,000	--------	11:00 a.m.
June 8 (Wednesday)			
Los Angeles Dept. of Water & Power System, California	15,000,000	--------	--------

DEALER-BROKER INVESTMENT LITERATURE AND RECOMMENDATIONS

IT IS UNDERSTOOD THAT THE FIRMS MENTIONED WILL BE PLEASED TO SEND INTERESTED PARTIES THE FOLLOWING LITERATURE:

Atomic Letter No. 56—Comments on new and sizable customer for Radiation Instrument Industry—Atomic Development Securities Co., Inc., 1033 Thirtieth Street, N. W., Washington 7, D. C. Also available is a bulletin on **Share in American Industry, Inc.**

Burnham View—Monthly Investment Letter—Burnham and Company, 15 Broad Street, New York 5, N. Y. Also available in current Foreign Letter.

Business Bulletin — Cleveland Trust Company, Cleveland, Ohio.

Canadian Business — Review — Wills, Bickle & Company, Ltd., 44 King Street, West, Toronto 1, Ont., Canada.

Canadian Cement Industry — Review with particular reference to **Canada Cement Company Ltd.** —James Richardson & Sons, 14 Wall Street, New York 5, N. Y. Also available is a review of **Moore Corporation Ltd.**

Canadian Gas Exports—Bulletin—Osler, Hammond & Nanton, Ltd., Nanton Building, Winnipeg, Man., Canada.

Canadian Natural Gas—Bulletin—Draper Dobie & Company Ltd., 25 Adelaide Street, West, Toronto, Ont., Canada. Also available is a study of **Greater Winnipeg Gas Co.**

Chemical and Pharmaceutical Briefs — Data and comparative figures on the industry — Smith, Barney & Co., 20 Broad Street, New York 5, N. Y.

Department Store Stocks — Bulletin with particular reference to **Associated Dry Goods Corp., Gimbel Brothers, and Marshall Field & Co.** — A. M. Kidder & Co., Inc., 1 Wall St., New York 5, N. Y.

Gold Stocks—Review with particular reference to **Homestake Mining, Campbell Red Lake Mines, Dome Mines, Kerr Addison Gold and Giant Yellowknife Gold**—A. C. Allyn & Co., 122 South La Salle Street, Chicago 3, Ill. Also available is a bulletin on **Purex Corporation, Ltd.**

Japanese Business Situation—Survey—Daiwa Securities Co., Ltd., 149 Broadway, New York 6, N. Y.

Japanese Imports — Review and outlook in April issue of "Investor's Digest" — Yamaichi Securities Co. of New York, Inc., 111 Broadway, New York 6, N. Y. In the same issue are analyses of the **Heavy Duty Electric Equipment Industry and Automobile Sales.** Also available are reports on **Mitsubishi Shipbuilding and Engineering Co., Ltd., Sumitomo Chemical Industry Co., Kawasaki Steel Corp., and Tokyo Electric Power Co. Ltd.**

Military Electronics—Review and analysis of prospects—Dean Witter & Co., 45 Montgomery Street, San Francisco 6, Calif.

Mutual Fund Management Companies — Analysis — Hemphill, Noyes & Co., 15 Broad St., New York 5, N. Y. Also available is a review of the **Rubber Industry.**

Oil Stocks — Bulletin — Hardy & Co., 30 Broad Street, New York 4, N. Y.

Over-the-Counter Index — **Folder** showing an up-to-date comparison between the listed industrial stocks used in the Dow-Jones Averages and the 35 over-the-counter industrial stocks used in the National Quotation Bureau Averages, both as to yield and market performance over a 20-year period — National Quotation Bureau, Inc., 46 Front Street, New York 4, N. Y.

Understanding Put & Call Options — Herbert Filer — Crown Publishers, Dept. A-7, 419 Park Avenue, South, New York 16, N. Y.—$3.00 (ten day free examination).

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Aluminum Co. of America—Review—J. A. Hogle & Co., 40 Wall Street, New York 5, N. Y. Also in the same bulletin are reviews of **American Brake Shoe Co., Nopco Chemical Co., Parke, Davis & Co., and Sears, Roebuck & Co.**

American Brake Shoe—Memorandum—Winslow, Cohu & Stetson, 26 Broadway, New York 4, N. Y.

American Chicle Company — Report—Shearson, Hammill & Co., 14 Wall Street, New York 5, N. Y.

American Telephone & Telegraph Co.—Analysis—Goodbody & Co., 2 Broadway, New York 4, N. Y. Also available is a memorandum on **American Machine & Foundry.**

American Telephone & Telegraph Co. — Review — Shields & Company, 44 Wall Street, New York 5, N. Y. Also available in the same circular is a discussion of **High Voltage Engineering.**

Ampex Corporation — Analysis — Carl M. Loeb, Rhoades & Co., 42 Wall Street, New York 5, N. Y. Also available are reviews of **Reynolds Tobacco, Broadway Hale Stores, and Transamerica-Occidental Life Insurance.**

Arkansas Louisiana Gas Corporation—Analysis—Cohen, Simonson & Co., 25 Broad St., New York 4, N. Y.

Joseph Bancroft & Sons Company —Analysis—New York Hanseatic Corporation, 120 Broadway, New York 5, N. Y. Also available is a study of Jaguar Cars Limited.

Baptist Hospital of Miami—Bulletin—B. C. Ziegler and Company, Security Building, West Bend, Wis.

Borman Food Stores—Analysis—H. Hentz & Co., 72 Wall Street, New York 5, N. Y. Also available is a bulletin on **Armstrong Cork.**

Bristol Myers Co.—Analysis—Hill, Darlington & Co., 40 Wall Street, New York 5, N. Y.

Brown Company—Analysis—Federman Stonehill & Co., 70 Pine Street, New York 5, N. Y.

Chicago National Bank — Memorandum on merger with **Harris Trust & Savings Bank**—William H. Tegtmeyer & Co., 39 South La Salle St., Chicago 3, Ill.

Copperweld Steel — Review — Ira Haupt & Co., 111 Broadway, New York 6, N. Y.

Crompton & Knowles—Report—Simmons, Rubin & Co., Inc., 56 Beaver St., New York 4, N. Y. Also available is a report on **Big Apple Supermarkets.**

Crowell Collier Publishing Co.—Memorandum — Murch & Co., Hanna Building, Cleveland 15, Ohio. Also available is a memorandum on **Giant Portland Cement.**

De Jur Amsco—Data—Cooley & Company, 100 Pearl Street, Hartford 4, Conn. Also available in the same bulletin are data on **American Photocopy, S. S. White Dental, and Harris Intertype.**

Dixilyn Drilling Corp.—Report—Hemphill, Noyes & Co., 15 Broad St., New York 5, N. Y.

Dura Corporation—Analysis—Hill Richards & Co., 621 South Spring Street, Los Angeles 14, Calif.

Emery Industries—Memorandum —W. E. Burnet & Co., 11 Wall Street, New York 5, N. Y.

Family Finance—Bulletin—Hayden, Stone & Co., 25 Broad St., New York 5, N. Y.

Freeport Sulphur Company—Report—Joseph Walker & Sons, 120 Broadway, New York 5, N. Y.

Gardner Denver Co.—Analysis—Montgomery Scott & Co., 120 Broadway, New York 5, N. Y.

Gulf Oil Corp.—1959 annual report — Public Relations Department, Gulf Oil Corporation, P. O. Box 1166, Pittsburgh 30, Pa.

Hanover Bank of New York — Bulletin—Laird, Bissell & Meeds, 120 Broadway, New York 5, N. Y.

Hunt Foods and Industries, Inc.—Analysis and appraisal—Sutro & Co., Van Nuys Building, Los Angeles 14, Calif. Also available is a memorandum on the **Vending Industry** and **Automatic Retailers of America.**

Hydrocarbon Chemicals Inc.—Bulletin — De Witt Conklin Organization, Inc., 120 Broadway, New York 5, N. Y.

International Telephone—Memorandum—Robert Garrett & Sons, South & Redwood Streets, Baltimore 3, Md.

Interstate Bakeries — Analysis — Boenning & Co., 1529 Walnut St. Philadelphia 2, Pa.

Lehman Corporation—Bulletin—Hirsch & Co., 25 Broad Street, New York 4, N. Y.

Martin Company — Bulletin—Jacques Coe & Co., 39 Broadway, New York 6, N. Y.

May Department Stores—Review —Fahnestock & Co., 65 Broadway, New York 6, N. Y. Also available is a review of **Koppers Company** and an analysis of **Gyrodyne Company of America.**

McGraw Edison — Report — Reynolds & Co., 120 Broadway, New York 5, N. Y. Also available is a report on **W. T. Grant Company.**

Molybdenum Corporation of America — Analysis — Parrish & Co., 40 Wall Street, New York 5, N. Y.

National Cash Register Co.—**Analysis**—Green, Ellis & Anderson, 61 Broadway, New York 6, N. Y. Also in the same circular is a review of **Philco Corporation.**

National Steel Corporation—1959 annual report — National Steel Corporation, Grant Building, Pittsburgh, Pa.

Pacific Power & Light Company—Analysis—Bateman, Eichler & Co., 453 South Spring Street, Los Angeles 13, Calif.

Pall Corporation — Analysis—Frank C. Masterson & Co., 74 Trinity Place, New York 6. N. Y.

Permanente Cement Co.—Analysis —Dempsey-Tegeler & Co., 210 West Seventh Street, Los Angeles 14, Calif.

Raytheon — Memorandum—Oppenheimer & Co., 25 Broad St., New York 4, N. Y.

Reichhold Chemicals Inc.—Analysis—Amott, Baker & Co. Incorporated, 150 Broadway, New York 38, N. Y. Also available are analyses of **Blaw Knox Company, American Telephone & Telegraph Co.**

Revlon, Inc.—Analysis—Blair & Co., Incorporated, 20 Broad Street, New York 5, N. Y. Also available is an analysis of **Philadelphia Electric.**

Revlon—Memorandum—Francis I. du Pont & Co., 1 Wall Street, New York 5, N. Y. Also available are memoranda on **R. H. Macy & Co., Westinghouse Air Brake, Youngstown Sheet & Tube Co.** and **M. Lowenstein.**

Richfield Oil Corporation — 1959 annual report — Secretary, Richfield Oil Corporation, 555 South Flower St., Los Angeles 17, Calif.

Stylon Corp. — Data — Purcell & Co., 50 Broadway, New York 4, N. Y. Also in the same circular are data on **Harbison Walker Refractories.**

Schering Corp. — Data — Paine, Webber, Jackson & Curtis, 25 Broad Street, New York 5, N. Y. Also in the same bulletin are data on **United Air Lines, Atlantic City Electric, Revere Copper & Brass.**

Siegler Corporation — Report—L. F. Rothschild & Co., 120 Broadway, New York 5, N. Y.

Standard Sign & Signal Co.—Analysis—Varothers & Company, Inc., Mercantile Bank Building, Dallas 1, Texas.

Tidewater Oil Company—Investment study — Eastman, Dillon, Union Securities & Co., 15 Broad Street, New York 5, N. Y. Also available is a report on **American Machine & Foundry Company.**

United States Life Insurance Company of New York — Analysis—William Blair & Company, 135 South La Salle Street, Chicago 3, Ill.

U. S. Rubber Company—Report—Thomson & McKinnon, 2 Broadway, New York 4, N. Y.

U. S. Vitamin — Memorandum—Hay, Fales & Co., 71 Broadway, New York 6, N. Y.

S. D. Warren Company—Analysis —First Boston Corporation, 15 Broad Street, New York 5, N. Y.

White Dental Manufacturing Company—Analysis — Hornblower & Weeks, 40 Wall Street, New York 5, N. Y.

Investment Club Forum To Be Held April 27

"Togetherness" is a word that's even getting these days into Wall Street lingo. A good example of this trend is the rapid growth of Investment Clubs — those folksy fiscal groups of men and women who pool surplus funds in order to enter the stock market on a community basis.

Although hundreds of such clubs have already sprung up across the land, there are still thousands of would-be club members who don't know just how to get an Investment Club started in their own community or how to run one profitably when it's organized. To help out in this dilemma the brokerage firm of Thomson & McKinnon is staging an Investment Club Forum in midtown Manhattan. Speakers will explain the technique of starting and managing such a club, and give helpful rules for shaping up a profitable investment program. A question and answer period will then follow.

Sponsored by the brokerage firm which has pioneered in this Investment Club field, the forum will be held Wednesday, April 27, in the Biltmore Suite, Biltmore Hotel, 43rd Street and Madison Avenue. It will run from 6 to 8 p.m. and will be open free to the public.

Garrett-Bromfield Adds

(Special to The Financial Chronicle)

DENVER, Colo. — Kenneth D. Adams has been added to the staff of Garrett-Bromfield & Co., 650 Seventeenth St., members of the Midwest Stock Exchange. He was formerly with Anderson Randolph & Co.

Narrower Profit Margins

By Paul Einzig

The whole question of narrower profit margins and the attitude of trade unions toward gains derived from automation or other improvements is scrutinized by one of England's leading economists. He points out that the benefits of progress should be passed on to the consumers in the form of lower prices, to the employees in the form of higher wages and salaries and to the owners to reward and continue this progress, but not to labor exclusively.

LONDON, Eng.—While the annual reports of some of the leading British industrial firms for 1959 show an expansion of profits, that expansion was not in proportion to the increase of their turnover. In other words, there has been a noteworthy reduction in profit margins. To some degree this has been due to lower prices, but in many instances wage increases must have contributed in no slight measure towards producing that result. One thing is certain. The firms concerned had the advantage of increased utilization of their equipment as a result of the expansion of their output, and also the advantage of technological progress, since in many instances new labor-saving equipment came into operation for the first time. Judging by the financial results, they have given away a very high proportion of the benefit derived from these changes, either in the form of lower prices or in the form of higher wages, or both.

A Sound Distribution

To some extent this is as it should be. The benefits derived from technological progress and increased productivity should be passed on to the consumer in the form of lower prices, and to the employees in the form of higher wages and salaries. But unless a sufficient margin is retained in the form of higher profits, the firms concerned are unable to finance adequately research, development, expansion and modernization out of their own resources. And unless in addition to ploughing back profits for those purposes they are able to distribute sufficiently high dividends, a stage may be reached at which it might become difficult to attract sufficient outside capital for those purposes. Needless to say, price reductions are always a welcome event. During many years since the War we got quite out of the habit of witnessing such events. Whenever the adoption of new equipment resulted in some labor-saving—in face of the determined opposition of trade unions to the dismissal of workers who became redundant—in the prevailing atmosphere of wage-price inflation the benefits assumed the form of additional wages and additional profits. Indeed, in innumerable instances reduction in the cost of production achieved through technological progress and expansion of output was not even able to prevent price increases due mostly to wage increases.

The trade unions appear to have established a principle that the workers are entitled to the full benefit derived from automation or other forms of modernization. It is, of course, essential to distribute additional purchasing power when the output increases, otherwise there would be nobody to buy the additional output. Unless a sufficiently large proportion of the benefit of technological progress is passed on to the consumer in the form of lower prices it must be passed on to the workers for, apart from social considerations, on purely economic considerations it would be shortsighted to do otherwise. But it is wrong to allow the trade unionist claim for the bulk of the benefit if not for the whole of it, passed unchallenged.

What is so fundamentally wrong about that claim is that it is based not so much on practical considerations of economic expediency as on ethical considerations of justice and equity. According to the trade unionist conception it is the workers' birthright to seize the surplus output achieved without any contribution of additional effort on their part. Physical laborers have got into the habit of denouncing members of the professional middle classes for deriving an unearned share of their output. In reality the boot is very much on the other leg. Technological improvement has always been almost entirely contributed by the middle classes. Were it not for their brains and their savings, physical laborers would be clawing the soil with their bare hands in the absence of capital equipment at their disposal. It is not the middle classes who enjoy unearned incomes but the working classes, to the extent to which they benefit by the fruits of technological progress.

Criticizes Labor's Wrong Spirit

This does not mean that they should not benefit by it. But they are allowed to benefit by it in the wrong spirit. And they are allotted an excessive share of the benefit at the expense of the rest of the community. The bulk of the benefit should be made available to the community as a whole and not only to those who happened to be using the equipment invented by middle class technologists and financed by middle class investors. The charge so freely made that these latter are in receipt of unearned incomes should be flung back into the face of those who make it and whose share in bringing about the improvement was incomparably less than that of the investor who risked his savings. Indeed, in a great many instances the workers' share in technological progress is a negative quantity. The trade unions are in the habit of resisting the installation of labor-saving equipment or are only prepared to consent to their employment in conditions in which it becomes barely worth while for the firms to spend on the re-equipment of their factories. Had it not been for this resistance to progress by the trade unions since the War, productivity would have increased much more and the standard of living would have been raised, incomparably higher.

Lenz Appointed By F. S. Smithers

SAN FRANCISCO, Calif.—Lowell Clifton Lenz has been appointed manager of the Institutional Department of F. S. Smithers & Co., Russ Building, according to James A. Felchlin, resident manager.

Mr. Lenz was formerly associated with the First National Bank of Nevada as a trust officer and the American Trust Company, San Francisco.

Joins Harriman Ripley

(Special to The Financial Chronicle)

CHICAGO, Ill.—Fred C. Samuels is now with Harriman Ripley & Co., Inc., 135 South La Salle St. He was previously with Blyth & Co., Inc.

Invest-in-America Luncheon April 27

NEW YORK, N. Y.—The Hon. Don Paarlberg, White House economic advisor who last week was named Food for Peace Coordinator by President Eisenhower, will be the principal speaker of the Invest-in-America Week luncheon scheduled for the Empire Room of the Waldorf-Astoria Hotel, Wednesday, April 27. Don G. Mitchell, president, General Telephone & Electronics Corporation, will serve as chairman. The luncheon is the principal function in a series of events planned by the New York City Invest-in-America Committee to mark the 1960 observance of Invest-in-America Week, April 24-30.

The Invest-in-America program, in the words of President Eisenhower, "emphasizes the importance of thrift and savings to the continuing growth of our nation." The theme of the 1960 observance is "Money at Work Means Men at Work."

William P. Worthington, president, Home Life Insurance Company, is general chairman of the Committee, assisted by Charles B. Harding, senior partner, Smith, Barney & Co., Robert J. Lewis, partner, Estabrook & Co., and A. Halsey Cook, vice president, First National City Bank of New York. The group's policy committee is broadly representative of the New York business and financial community.

Events planned to mark this year's observance in Invest-in-America Week include a day-long symposium for teen-age presidents of Junior Achievement companies active in New York City, tours of the financial district by secondary school economics students, a two-day conference at the New York Stock Exchange to be attended by 150 teachers representing 130 junior-senior high schools in the New York metropolitan area, an exhibit to be staged in the Seventh Avenue arcade of Penn Station, and many other events yet to be announced.

Thirteen groups including the U. S. Savings Bonds Division, Treasury Department, sponsor Invest-in-America Week and the year-around educational program of the New York City Invest-in-America Committee. The remaining sponsors consist of the American Stock Exchange, Association of Stock Exchange Firms, Edison Electric Institute, Institute of Life Insurance, Investment Bankers Association, National Association of Investment Companies, New York Board of Trade, New York Stock Exchange, Real Estate Board of New York, Savings Banks Association of the State of New York, Security Traders Association of New York, and the Young Men's Board of Trade.

With W. F. Marshall

(Special to The Financial Chronicle)

ANAHEIM, Calif. — Homer L. Chattin is now connected with W. F. Marshall & Co., 300 Wilshire Av. He was formerly with Francis I. du Pont & Co.

Joins Shearson Hammill

(Special to The Financial Chronicle)

LA JOLLA, Calif. — George W. Birkhofer and Samuel E. Wayman are now affiliated with Shearson, Hammill & Co., 1125 Wall St. Both were formerly with Merrill Lynch, Pierce, Fenner & Smith, Inc.

Today's Electronics Offer Dynamic Industrial Growth

By James D. McLean, President of the Stromberg-Carlson Division of General Dynamics Corporation, New York City*

Tracing electronics' dynamic growth in its various aspects, Mr. McLean singles out the various sources that have pushed this industry into one of prominence and high promise. The author describes the fantastic capabilities of electronics in everyday terms, the reasons why aircraft companies are also large manufacturers of electronics, and the challenges facing the industry today. Highlighted are the fields urgently demanding the aid of electronics and what we can expect electronics to be doing for us in the future. Going beyond the glamor areas of a great future offered by this industry, Mr. McLean deals with the prosaic fields wherein he envisions some electronics' greatest advances.

Twenty-five years ago, electronics was hardly classified as an industry—it stood 49th among listed categories of manufacture in this country. Today it is no lower than fifth, and perhaps by this time is fourth in dollar volume among the industries in the United States — and Jack Morton, Vice-President of Bell Telephone Laboratories, has predicted that it soon will be in first place.

James D. McLean

There is no question but that electronics is the most rapidly growing segment of the American economy today. The Electronics Industry Association has reported that last year—1959—the industry grossed $9.2 billion. This was a 16% increase over the previous year—a rate of growth that has been accelerating steadily over the past decade. The forecast of E. I. A. for this year is $10.35 billion, and I think we can agree that, in the light of these figures, an expectation of a $20 billion year by 1970 does not seem unrealistic.

Compare this growth, if you will, with the gross national product, which, for the past decade, has shown a rather steady annual increase of approximately 6%, when measured in current dollars.

Naturally, this growth makes the electronics industry one of the larger employers in the country. Electronics manufacturing now provides jobs for close to three-quarters of a million people —a figure that is approximately double what it was in 1950. Annual production per employee is approximately $12,000, a figure which also has been trending upward at a moderate rate.

Although the picture of the electronics industry's growth is quite clear—the industry itself is not quite so easy to delineate. It comprises a total of about 4,600 plants—a figure that changes daily —and it is doubtful if you would find such diversity of operations in any other industry. They range all the way from two- or three-man shops, turning out 2-cent capacitors in a garage, to the corporate giants specializing in vast, multi-million-dollar military electronic systems.

Manufacturers and Assemblers of Components

In general, the industry has two principal segments. There are, first, the manufacturers of components — capacitors, resistors, transistors, connectors, transformers, rectifiers, vacuum tubes and all the other bits and pieces that go to make up an electronic system. Some of the more sophisticated electronic equipment, as, for example, a big computer, may have several hundred thousand components. Some manufacturers in this category are specialists, producing only one type of component, such as transformers, while others make a wide variety of components. In dollar volume, this component segment of the industry accounted for approximately $2.2 billion in sales last year.

In the other portion of the industry are those companies which buy components from the first group and put them together into sub-assemblies and then into the final product—which might be a tiny transistorized hearing aid, or a vast intercontinental defense reconnaissance system.

Needless to say, these two segments frequently overlap—there are many firms that are both manufacturers of components, and assemblers of electronic equipment.

As I'm sure many know, approximately half of the nation's electronics products—$4.5 billion worth in 1959, to be more exact—go into the national defense effort. It is expected that this ratio will remain fairly constant over the next several years, at least.

Of the remainder of the electronics production last year, slightly more than $2 billion worth was in consumer goods—radio and television receivers, high fidelity phonographs, home intercom systems, and the like. Industrial and commercial applications, mostly data handling, process control and communication equipment, took about $1.55 billion worth, and the rest was accounted for in replacement parts, vacuum tubes and other "expendables."

As is indicated by the figures just cited, our nation's defense is coming to rely more and more on electronics. As recently as ten years ago only 4% of our defense budget went into electronic gear. This year it will be about 15%, and by 1965 we expect that at least 20% of all defense expenditures will go for electronic equipment.

Why Aircraft Companies Had to Go Into Electronics

It's easy to see how this has come about. During World War II, electronic equipment made up approximately 2½% of the weight of military aircraft, represented about 11% of the manhours required to build the plane, and accounted for 16% of the cost. This equipment was principally radio communication gear, radar bombsights, and some blind-flying instruments.

But since then the situation has changed drastically. Modern jet planes are so fast, and man's senses and reaction time are so slow, that it is necessary for the plane to be navigated, steered, and have its weapons fired entirely by electronics. So present military planes are crammed with "little black boxes" that account for as much as 10% of the weight and 50% of the aircraft's cost.

This explains why many aircraft companies also are large manufacturers of electronics. Ten years or so ago, when the requirements for these "black boxes" became more and more urgent, the aircraft companies couldn't find very many electronic firms who would build the "boxes" for them. The electronic companies were too busy building television sets to bother with these exotic military equipments with their strange and extremely stringent requirements. So the aircraft companies had to go into the electronic business themselves.

The advent of missiles has further accelerated the growth of military electronics, for these weapons are even more complex nests of intricate and costly electronic gear.

The tremendous push given to electronics by these military requirements certainly was a major factor in the industry's growth, but by no means was it the only one.

Certainly the development of semi-conductor devices, such as the transistor and the big family of other solid-state electronic devices that have come along in rapid succession, not only provided a powerful stimulus, but was, in fact, what made possible much of today's electronic equipment.

Fantastic Semi-Conductor Growth

If the growth of the electronics industry has been spectacular, that of the semi-conductor portion of the industry has been little short of fantastic. From the zero point less than ten years ago, semi-conductor sales have risen to an annual rate of half a billion dollars, and it looks as though this figure may double within the next two years.

No doubt many are familiar with the excellent report on semi-conductors in the *Business Week* of March 26.

To see the reasons for this rapid expansion of the electronics industry, we need only give a little thought to what electronics does for us. We use electronics in many ways to extend and refine our own senses, and to amplify our capabilities. Electronics is essentially a technique for handling information.

We use electronics to acquire information. A radar beam reaches out, and brings back the information that an enemy plane is out there, at a measured distance and altitude, heading in a certain direction, and traveling at a certain speed.

Then, if need be, we use electronics to store information, augmenting our own memory.

For example, in our radar system we have previously placed data correcting for the rotational velocity of the earth, wind speed and direction, or other factors. This information then is available for use whenever it is required in the next step.

Third, then, is processing of the information. Working with the speed of light, our electronic system projects the course of the enemy plane, corrects for factors on which information is stored, computes the course the defensive weapon must take to intercept the attack, and, at the proper microsecond, transmits an electronic command firing the defensive weapon, thus fulfilling the fourth function — transmission of information.

Finally, electronics provides the machine-to-man link by performing the display and readout function, reducing the information to visual or audible form that man can absorb. The audible form is familiar to all of you, in such devices as the shipboard "squawk box," or your home high fidelity phonograph. But the kind, and amount, of information that can be absorbed by man through his ears is severely limited. Transfer of information by visual means also is limited in time, but to a much lesser degree, and of course if the information can be stored—that is, reduced to printed form—it is then available for reading and comprehension at man's convenience.

Electronics, working through such devices as Stromberg-Carlson's "Charactron" tube, can convert information and present it in visual form at rates that are little short of fantastic. For example, the "Charactron" tube can display letters and numbers at speeds of 100,000 per second. As one newspaper quipped, in commenting on that fact: "Who can read that fast?" Of course no one can, so the information that is displayed at that rate must be stored — which is done either photographically, or by a xerographic process, in our high speed printers.

So much for the capabilities of electronics, although this brief review has really not even begun to touch on all the areas in which this technology can be applied.

Challenges Facing the Industry

Here are some of the challenges the electronics industry is facing today.

One of the principal ones is reliability. The "Tiros" weather-eye satellite is not expected to transmit its information back to us for much more than three months, because that is about the limit of the reliability of its electronic system, although it probably will stay in orbit for a decade or more. How can we make such systems more reliable? Consider the problems of manufacturing a device so small that it is barely visible to the naked eye, of materials whose composition must be so exact that one part in a million is critical, and producing them in quantities of hundreds of thousands, all required to meet rigid electrical specifications with exceptional uniformity.

And consider, too, the environmental conditions under which some of these components must function — severe vibration and shock — elevated temperatures — absence of atmosphere — perhaps other conditions of which we're not completely aware, such as cosmic radiation. Suppose we do achieve 99.999% perfection in the performance of every electronic component we produce—that still is not good enough in a system that contains 100,000 components. That degree of reliability would not get an Atlas off the ground more than once in 10 tries—and the Atlas has, as you know, done much better than that.

Another challenge is technological obsolescence. Military requirements particularly are constantly pushing back the frontiers in technology, and forcing rapid advances in the state of the electronics art. This means that, by the time we have become familiar enough with a new electronic device to know how to use it, and have developed circuits to fit it into our equipment, it has become obsolete, replaced by another new device which does more things, does them better, and probably is less expensive to produce. So we

have to start in over again—but meanwhile we have to stay in business, producing hardware that works, and that we can sell.

Still a third challenge that we in this country face is foreign competition. No discussion of the electronics industry would be realistic that did not call this to our attention. Let me mention just one simple fact—imports of electronics goods into the United States doubled last year—a 100% increase in just 12 months. Let no one underestimate the challenge which this poses for us. We should not forget that many of the more significant advances have been made in other countries. The tunnel diode and the parametron, for example, both originated in Japan, and the industries there have been quick to exploit their advantages. Observers who have visited electronic industries in that country have come back greatly impressed by the high technical competence, ingenuity and industriousness of their people. And the same can be said of the electronic industry in other countries — The United Kingdom, France, Germany, and Sweden, to mention a few. The cost of labor is not the only basis on which they are competing with us, and we must not delude ourselves into the false assumption that we hold a technological superiority.

Future Expectations

Finally, suppose we take a brief look at some of the things we can expect electronics to be doing for us in the future.

First, there's the whole field of automation and process control. Industrial engineers have been applying electronics to the control of machines and processes at an accelerating pace for many years, using such devices as the "electric eye," pressure and temperature transducers, and myriad others, but we really have hardly crossed the threshold of electronic control.

We have heard talk in the past about "push-button factories." Now we're virtually at the stage where electronics will even push the buttons. Big oil refineries and chemical processing plants, interlaced with rugged electronic sensing units, all linked to power switches, valves and other control elements, can be operated by one man whose principal function is to change the graph paper in the instruments that record what has been going on.

In the machine tool field, the concept of numerical control is gaining ground, not only as a time and money saver, but as a means of producing things that couldn't be made before. As an example of numerical control, let me tell you about Stromberg-Carlson's "Digimatic" system. To produce a complex mechanical part by this system, the machinist enters the dimensions of the part he wants to make into a keyboard, much like the keyboard of a conventional office computer. This information is interpreted by a special purpose electronic computer in terms of movement of the milling machine's work table and cutting tools, the proper command instructions to control those movements are generated, and recorded on magnetic tape. This tape then is used to control the operation of the machine. All the operator does, in this case, is clamp the work piece in place, and push the "start" button.

Data handling, which has accounted for much of the industrial electronics in the past few years, is certain to see a very rapid expansion in the next decade. With the development of electronic sensing devices of both optical and magnetic types, and of high speed electronic printers like Stromberg-Carlson's S-C 5000, we will soon find electronics taking over vast quantities of paper work—preparing invoices, bills of lading, statements, checks and many other business documents. Many banks already are partially processing their checks by electronics, and as the capability to do this becomes more widespread, it won't be long before electronics will take over most of the arduous and costly work of handling checks.

Another field which is urgently demanding the aid of electronics is that of air traffic control. A completely electronic and universal system, covering not only the nation, but the globe, is imperative. Electronics is already serving in air traffic control in many ways, providing communications, guidance beams, navigation beacons and other aids, but the progress in aircraft has outstripped the progress in control systems. As a practical example, suppose two jet transports, of the types in the air today, approach each other from opposite directions, on a collision course. By the time the planes are within visual observation distance of each other they are doomed—there is not time for either pilot to take action to avoid collision. Electronics must be called upon by the nation's airways to control traffic so these situations won't develop. With the proper application of data processing techniques, electronic computers can receive and digest flight plans, interpret weather information as it affects flight time, maintain constant surveillance over the airways by radar, and even issue instructions to pilots to cover emergency conditions. With the thousands of flights that daily criss-cross the nation, and the rapid increase in this number, electronic air traffic control is an absolute necessity.

Prosaic Field May Witness Greatest Advances

Even with all these glamor areas in which electronics has a great future, it may well be that it is in the more prosaic field of communications—telephony, radio and television—that the industry will score its greatest advances.

The big problem here is the limitation imposed by the finite electromagnetic spectrum. There just aren't enough wavelengths to go around—to let us do all the things we'd like to do over them.

Because of this acute problem, a great deal of effort is being expended in research and development aimed at devising techniques for making more efficient use of the radio spectrum.

One method, of course, is to divide it up into narrower bands, making more of them. But the trouble is that this places limitations on the kind of information we can send over them. In the present state of our technology, for example, we need a minimum bandwidth of 3000 cycles for satisfactory transmission of the human voice — and approximately 2000 times that bandwidth for a television signal. We can narrow those limits somewhat, but we start to degrade the quality of the signal if we do it very much. Transmission of digital data, incidentally, can be done within much narrower limits, so that we can send perhaps as many as a couple dozen teletype messages over the same bandwidth needed for voice transmission.

I think we'll learn how to extend our capabilities in this field, but it's going to take some real scientific breakthroughs to do it. We've learned, for example, that by using a device called a "Vocoder," which analyzes speech and filters out all but a few essential components, we can transmit these components in a much narrower bandwidth. Then if, through a speech synthesizer at the receiving end, we restore the sounds that we removed, what comes out is remarkably like the original.

Or we may crowd more messages into a single circuit by time division multiplexing. In this sort of system an electronic scanner samples messages on a group of circuits—perhaps as frequently as several hundred times per second. In voice transmission this is often enough so that no important components are lost, and, in fact, anyone listening to a conversation being transmitted in this way cannot detect that the transmission is not continuous. But you can see how it makes possible the sending of many messages or conversations simultaneously over a single circuit.

Actually, we have reviewed here only a few of the many exciting prospects in the electronics industry. We hardly realize how broadly and profoundly electronics has changed our way of life, with devices that open and close our garage doors, sensitive instruments that help physicians diagnose our ills, television that let's us watch great historical events—and, some events of lesser import—as they actually happen, and myriad other devices that support our national defense and help to supply the necessities of modern life or enhance our comforts.

But electronics is really just at the toddler stage. We're now talking about designing supersonic aircraft by electronic computers—about a continuous defense surveillance by satellites—about providing every citizen of the country with a "Dick Tracy" pocket telephone and a permanent telephone number, issued at birth, by which he can be called from anywhere on the globe.

Compared with what's ahead, "the past is only prologue,"—or as the cabbie is reported to have translated the high-sounding phrase—"you ain't seen nothing yet."

*An address by Mr. McLean before the Institute of Investment Banking, Wharton School of Finance and Commerce, Philadelphia, Pa., April 11, 1960.

With J. C. Bradford

(Special to The Financial Chronicle)

ATLANTA, Ga. — Morris M. Glazer has joined the staff of J. C. Bradford & Co., William Oliver Building.

First Southern Adds

(Special to The Financial Chronicle)

ATLANTA, Ga. — William E. Bailey has been added to the staff of First Southern Corp., 70 Fairlie St., N. W.

Federman Stonehill Branch

BEVERLY HILLS, Calif.—Federman, Stonehill & Co. has opened a branch office at 9025 Wilshire Boulevard under the management of Horace W. Smith.

$100 Million N.Y. Bridge Agency Bonds on Market

Dillon, Read; White, Weld; W. H. Morton; Allen & Co. group offers $100,000,000 Triborough Bridge and Tunnel Authority revenue issue, representing first public financing for Verrazano - Narrows Bridge project.

Dillon, Read & Co. Inc., White, Weld & Co., W. H. Morton & Co. Incorporated and Allen & Company head a nationwide underwriting group which offered for sale on April 19 an issue of $100,000,000 Triborough Bridge and Tunnel Authority Narrows Bridge Revenue Bonds, first series.

The issue consists of $74,000,000 of 4% term bonds, due Jan. 1, 1985, priced at 100%; and $26,000,000 serial bonds maturing on each January 1, from 1970 to 1975, priced to yield from 3.50% in 1970 to 3.75% in 1975.

The bonds are subject to redemption, on and after Jan. 1, 1970, as a whole or in part as follows: the bonds due Jan. 1 1985 are redeemable out of sinking fund instalments at 100% and otherwise at 103% of the principal amount to and including Dec. 31, 1973 and at declining prices thereafter; and the serial bonds are redeemable at 103% of the principal amount to and including December 31, 1972 and at declining prices thereafter.

By signing the contract of purchase, the Authority took the first step in the public financing of the $325,000,000 Narrows Bridge Project. The bridge is scheduled to be opened to traffic on May 1, 1965.

A portion of the proceeds to the Authority from this financing will be used to retire $50,000,000 of 3% promissory notes due June 15, 1960, which were issued to pay a part of the cost of construction of the Narrows Bridge Project, and approximately $21,840,000 will be paid into a temporary interest fund, representing interest on the first series bonds through October 31, 1965. The balance amounting to approximately $26,114,000 together with approximately $43,060,000 of unexpended proceeds from the promissory notes will be used for construction.

The Authority is a public benefit corporation whose members are Robert Moses, chairman, and George V. McLaughlin and William J. Tracy, vice chairmen. George E. Spargo is the general manager. Present facilities of the Authority include: The Triborough Bridge, Bronx-Whitestone Bridge, Henry Hudson Bridge, Marine Parkway Bridge, Cross Bay Parkway Bridge, Throgs Neck Bridge (under construction), Brooklyn-Battery Tunnel and Queens-Midtown Tunnel. Other facilities are the Battery Parking Garage, the East Side Airlines Terminal, and the New York Coliseum at Columbus Circle in Manhattan.

Total revenues of the Authority in 1959 amounted to $43,108,000, and net revenues before bond service amounted to $33,982,000. In 1958, total revenues were $40,951,000 and net revenues before bond service $33,024,000.

Interest on the bonds is exempt from Federal income taxes and New York State income tax, and the bonds are legal investments under New York State law for insurance companies, savings banks and trust companies, savings banks and certain trust funds, in the opinion of bond counsel.

H. A. Riecke Co. To Be NYSE Firm

PHILADELPHIA, Pa.—On April 28th Henry A. Riecke will acquire a membership on the New York Stock Exchange, and H. A. Riecke & Co., Inc., 1433 Walnut Street, will become members of the New York Exchange in addition to its membership in the Philadelphia Baltimore Stock Exchange.

Officers of the company are Henry A. Riecke, chairman of the Board; John E. Parker, President; Frank T. Betz, Jr., Executive Vice President; Darrah E. Ribble, senior Vice President; Richard J. Handly, Secretary and Assistant Treasurer; Albert J. Davis, Treasurer.

Joins Irving Lundborg

(Special to The Financial Chronicle)

PALO ALTO, Calif. — Robert L. Sinclair has joined the staff of Irving Lundborg & Co., 470 Ramona St.

Now Proprietor

PARKVILLE, Mo. — Webster W. Holloway is now sole proprietor of Martin-Holloway-Belcher, 101 East First St. The firm was formerly located in Kansas City, Mo.

Formidable Changes Arising In the Electronics Industry

By F. C. Reith, President, Crosley Division, Avco Corporation
Cincinnati, Ohio

Pace of defense oriented electronics is held to be such as to make it difficult to determine which companies have the necessary skills and know-how. Also, that it has stunted research into commercial and industrial areas wherein lies electronics' research great potential. Other cogent comments deal with: recent emergence of many small companies, trend away from large orders, greater effort in research and development, keener competition and definite need for controlling cost as surplus capacity develops, and importance of restoring an effective balance between defense and commercial needs for the growth of a healthy and successful industry.

The years since World War II have been marked by great changes in electronics. Goals which seemed remote 10 years ago are a normal part of industrial life today. The accelerated pace of research, much of it due to defense activities, not only has produced new weapon systems but has paved the way for the emergence of industrial and commercial products years ahead of the normal processes of evolution.

F. C. Reith

Defense industry is big business, and the electronics portion of it accounts for over $4 billion. In many instances, the emphasis on defense research has caused industry to move so rapidly into the future, and into fields so unknown, that traditional planning has been abandoned. Company diversification seems to be the current pattern that is evolving and it is difficult to ascertain today which companies have the skill and know-how to probe into particular requirements of our nation's defense.

In past decades, munitions makers made guns, but today they may be engaged in every field from synthetic fibers to human engineering. Companies formerly engaged solely in the production of foodstuffs today are diversifying through acquisitions to produce insulating equipment. Another company whose activities in the past were devoted to the production of cigarettes has branched out into adhesives and wire insulating units. Whole industries formerly devoted to providing consumer products and services have found it profitable to enter the defense field.

At the present time the electronics industry is made up of more than 4,000 companies and the entrance of new firms into the field hardly seems at an end. Typical of this mushrooming growth is the example provided by the growth of the electronics industry on the West Coast. In 1949 there were 85 electronics firms in existence in that area. At the end of 1959 there were over 770 firms engaged in electronics production. The industry as a whole, employs more than 100,000 engineers, approximately one-fifth of the nation's total. Today, military uses account for the largest application.

Recent years have seen the emergence of thousands of small firms, especially in electronics, who actively participate in the business of defense. These firms owe their success in large part to their highly skilled technical personnel. Few have been faced with the problems of maintaining a large organization. By keeping their costs at a minimum, these firms have been able to cope with the competition of larger companies, and in time, experience on small projects has given them an opportunity to share in the development of more important programs.

Trend Away From Large Orders

While competition has been growing, we are witnessing a trend away from large orders in defense industry and toward the production of many different models in small quantities. Far more effort will go into research and development work in the future, and correspondingly less into production, than has been true of the past.

The days when 3,000 identical airplanes were built for our defense is pretty much a thing of the past. As we enter the space age, fewer and fewer vehicles will be built, and each will be a more refined, specially engineered product.

As a result of these trends, competition for the defense dollar in electronics will become more intense, even as the applications of electronics to defense problems continue to expand. Therefore, the companies that will be successful in securing military contracts will have to demonstrate more than just know-how.

Importance of Controlling Costs

The picture for electronics in the years immediately ahead clearly portends continued growth, but with increasing competition from within the industry itself. As a result, cost control will assume a new and important dimension in this industry, as well as throughout all defense industry.

This means that overhead or burden rates must be studied carefully, not to see how well they can be justified, but rather, how they can be reduced without eliminating essential programs and services. Burden rates tend to be crepitative in one direction —upwards. Holding them down is a continual problem calling for management's eternal vigilance.

As a result of the reduced emphasis on production, defense industry is finding itself faced with more facilities than it needs. The proper consolidation of its efforts into those facilities where work can be performed most efficiently is and will be called for as time goes on.

Finally, establishment of a management organization to fit the needs of product groups so that questions and problems may be dealt with directly and swiftly as they arise by the personnel most intimately concerned also can serve to enhance efficiency and reduce costs.

More than half of the electronics is devoted to defense activity. Often, this heavy emphasis on military application has stunted research into commercial and industrial areas. We have hardly tapped the great potential that electronics' research can offer. Some effective balance obviously should be restored to the industry to meet the requirements of military needs as well as consumer and commercial requirements. It is in effecting this balance between military and commercial needs that a healthy and successful industry can continue to grow.

The Vast Electronic Age Is Just Around the Corner

By B. F. Gira, President, United Industrial Corp.,
Los Angeles, Calif.

Beyond the use of electronics for defense and space exploration is the compelling economic need for it to meet the vital population and industrialization requirements of everyday living. Mr. Gira outlines where electronics has grown and where it still must grow if we are to meet business survival needs of greater productivity and to make products possible which otherwise would not exist.

I believe the electronic industry is likely to grow as fast in the future as it has in the past. I think it is going to grow in usefulness and size and stature for beyond anything we now realize. Let me give some reasons for this belief.

With a large share of its investment and operations devoted to design, development and manufacture of electronic products for national defense, civilian service and industrial use, we have a big stake in the future of this industry. Our products are widely diversified among a large number of defense and civilian applications. On every hand we see increased use of electronically guided and controlled devices and electronic techniques.

The most dramatic growth, of course, has been in the fields of defense and space exploration where the applications now account for more than half of the industry's total output. Our tools of defense involve constantly greater electronic content, and the same is true of the vehicles being developed for extraterrestrial flight.

Held a Vital Economic Need

But however important our defense needs, and however intriguing our excursions in space, our vital long range problems are in the field of economics. In a period when time and space are shrinking with supersonic speed, the harnessing of the electronic technology becomes a job of top priority. As populations continue to expand at an explosive rate and our environment becomes increasingly industrialized, nothing short of the speed of electronics is adequate to meet the requirements of everyday living.

In some fields, where time and space have already enforced extraordinary demands upon business and industry, such as in data processing, computing, and recording, electronics is fast taking over tasks now impossible of performance by human hands and minds alone.

In the vital areas of production, processing and distribution of goods, the use of electronics is still practically in its infancy. Thus, while the mountain of detail entailed by the administration of commerce and industry today has forced widespread adoption of electronically automated computing, data processing and communications devices, automation in production and distribution tends to lag. This is due partly, I believe, to the fact that the name we give to its application in these fields — automation, still suffers from a vague, lingering association with the myth, long since exploded, that automation is a deterrent to full employment.

In our own group of companies, we come across many striking demonstrations of the versatility of automation. Our Micro Path Division designs and builds automation systems for any production or distribution problem that involves linear or rotary motion. Examples of cost cutting and the telescoping of time and space requirements are commonplace.

Frequently, automation will make possible a product which otherwise could not even exist. One of the major products of Perry Rubber, one of our Industrial divisions, is a disposable surgical glove for hospitals and the medical profession. Production of a disposable item of this nature can be measured in almost astronomical numbers of pairs. The tightest of cost control must be maintained without sacrificing rigid adherence to high quality standards. Without the genius of automation engineering and application, this product just would not have come into being, and its value to overworked hospital staffs would be lost to the field of medical care.

Only Way to Achieve Greater Productivity

The vast market that increasing automation of business and industry will bring to the electronic field is, in my opinion, just around the corner. Every business man knows that in greater productivity lies his only real hope of survival in an increasingly competitive market. We as a nation are beginning to realize that our real problem is economical survival, that increased productivity is the only sure key to the problem, and that increased productivity means automation. When we become actively concerned over the fact that other countries are already far ahead of us in rates of productivity, the electronics industry will really grow in usefulness, importance and volume of output.

Gudeman To Become Lehman Partner

Lehman Brothers, 1 William St., New York City, members of the New York Stock Exchange, announced that Edward Gudeman will be admitted as a general partner subject to the approval of the Board of Governors of the New York Stock Exchange.

Mr. Gudeman recently resigned as a Vice-President of Sears, Roebuck and Co. in charge of merchandising and continues to remain a member of the Board of Directors. He joined Sears, Roebuck after graduation from Harvard in 1927.

G.E. Parks Offers Captains Club

G. Everett Parks & Co., Inc. on April 19 offered 500,000 shares of the common stock of Captains Club, Inc., the service club of the waterways, at $2.00 per share.

The purpose of the issue is to provide capital for expansion of the corporation's services to pleasure boat owners.

Public Mortgage Co.

MIAMI, Fla. — Public Mortgage Co., Inc. of Florida is conducting a securities business from offices in the Seybold Building. Officers are H. Barry Ressler, President; Alvin L. Sklow, Jerold J. Schwarz, and Oscar M. Williams, Vice-Presidents; and Herbert Marholies, Secretary-Treasurer.

How to Check Recessions And Foster Real Growth

By Dr. Arthur F. Burns,* *Professor of Economics, Columbia University; President National Bureau of Economic Research, New York City; and Former Chairman of Council of Economic Advisers*

One of America's leading economists advises the time to take anti-recessionary measures is now, when the economy is strong, and he details several constructive steps we should take to cope with future recessions. They deal with reforming our unemployment insurance system, amending the Employment Act to include the goal of consumer price stability, improving our balance of payments, and utilizing tax reduction in preference to increased government spending with a business decline and curtailing government spending when credit restraint is being enforced. Dr. Burns explains why a highly restrictive credit policy is no longer necessary for the time being, and analyzes the successful curbing of the dangerous psychology of inflation in 1959 and how resolute public and private action can forestall strong inflationary forces.

The subject which I will confine myself to is the chronic problem of inflation. What I have to say can be put very briefly. First, inflation can be curbed. Second, we have in fact made remarkable progress toward this objective during the past year. Third, inflation remains a major long-range problem. Fourth, while a sound dollar promotes economic progress, it alone will not suffice to assure a satisfactory rate of progress.


Dr. Arthur F. Burns

Let us go back 12 or 15 months before we consider current needs.

A year ago it was widely believed that the forces making for inflation in our country were much too strong to be checked in the near future. The reasons for this belief seemed clear and compelling. With minor interruptions our nation had practiced inflation for a generation. And it appeared that we were still continuing to do so.

The recent recession gave eloquent testimony of the trend. Wages moved up in the face of considerable unemployment. So too did prices at wholesale and retail despite extensive idle capacity in our mines, factories, and shops. And although the economy was advancing vigorously once again by the end of 1958, the cash deficit of the Federal Government was still mounting. In addition, the large increase of the money supply which occurred during the recession was still being extended.

In these circumstances it seemed only reasonable to economic observers to expect that wage rates would rise in the foreseeable future beyond any increases of industrial productivity, that business firms would generally find it possible—if not also congenial—to raise prices, and that the money supply or at any rate its turnover would increase sufficiently to finance a growing volume of business activity at rising prices.

Such expectations would be plausible in any period when the economy is recovering rapidly from a business recession. But they seemed all the more assured in the light of the theory, which became increasingly popular after World War II, that we are living in an age of inflation. The upward course of wages and prices during the recession, when there obviously was an insufficiency of demand, gave powerful support to this theory.

Since more and more people felt that the trend of the general price level is inexorably upward, fixed income assets—such as savings bonds, other government securities, and corporate bonds — lost much of their traditional appeal. Common stocks, on the other hand, became increasingly popular. Their prices rose briskly in the closing months of 1958 and the first half of 1959, on top of the great advances of recent years. Price-earnings ratios, which were already abnormally high, became still higher.

Rationalizers of Inflation

When such developments occur, there are always influential people around to rationalize them. The old financial yardsticks. we were told, had lost their significance, first, because common stocks were the only hedge against inflation for the average citizen, second, because we were on the threshold of the "fabulous sixties" which would dwarf the economic accomplishments of earlier decades. These lyrical pronouncements helped to feed and spread an inflationary psychology.

A rising level of consumer prices would be enough of an evil if it merely caused enrichment of some groups of people at the expense of others. But if inflation continues unchecked, it also can strike at the roots of a nation's prosperity and thereby bring difficulty to all groups.

When people lose confidence in the integrity of their money, they will devote to speculation much of the energy that would otherwise go into industrial and other constructive activities. Every speculative boom eventually comes to an end and economic collapse is usually its aftermath. But this was not the only danger that our economy faced in the early months of 1959.

As long as our payments on international account were only moderately larger than receipts, as was generally the case after 1950, there seemed to be no ground for concern. On the contrary, we could regard the redistribution of international monetary reserves as proof that our nation's policy of helping the countries of Western Europe and other parts of the world to strengthen their economies was working out reasonably well. But in 1958 the balance of payments turned sharply adverse. This happened largely because our exports slumped while imports at first held steady and later rose. Although our gold stocks remained abundant, the loss of over $2 billion of gold could not be ignored.

Gold Characterizes the Problem

In fact, this loss of gold attracted more attention abroad than in our own country. Foreign central bankers and investors, many of whom had learned from bitter experience what inflation can do to people, began asking searching questions about the wisdom of our financial policies. Indeed, some foreigners of wealth began to wonder whether, in view of the inflationary bias of our economy, it was really safe to leave their money on deposit or invested in Treasury bills here.

Thus, foreign concern over the future of the dollar added a new and grave dimension to the domestic struggle against inflation. For a generation we had been able to pursue economic policies as if the balance of payments were some sort of difficulty from which foreign countries suffered but from which we were exempt. Now we too had to take account of it.

It became important for us to resist inflation not merely to prevent hardships to sizable groups of our population, not merely to prevent a speculative boom which could lead to serious domestic trouble, but also to quite incipient fears abroad concerning our ability or willingness to cope with inflation. Unless we succeeded in reassuring foreign investors about our economic policies, we ran the risk that external confidence in the dollar would be shaken, that billions in foreign assets held here would be repatriated after being converted into gold, and that the resulting financial crisis would threaten our political and military leadership of the Free World.

It is always a simplification to treat domestic problems apart from foreign problems, or to treat economic problems apart from the philosophic and political currents that move men. There are times when this can be done without harm, but the early months of 1959 were not such a time. Our international prestige as well as our domestic economic affairs had become clouded by the spread of an inflationary psychology. Mildly restrictive policies, such as our government had pursued from time to time in the pastwar period, could do little good in the circumstances. Strong and dramatic measures were needed if the inflationary psychology, which had been built up over years, was to be curbed before it caused serious damage to our domestic economy and to our international position.

A Tighter Squeeze Than Realized

Fortunately, our economic policies were adjusted. Indeed, they became more restrictive than is commonly realized. I think that 1959 will be principally remembered in economic annals as a year in which a dangerouos psychology of inflation was gradually but effectively curbed.

In the first place, contrary to the run of expectations, the newly elected Congress largely followed the President's recommendations on expenditures. The expansion of federal spending therefore halted, while revenues continued to increase rapidly as economic activity grew. In the first quarter of 1959, federal cash payments to the public still exceeded receipts from the public by a very wide margin. Allowing for seasonal factors, the deficit then ran at an annual rate of nearly $18 billion. In the next quarter, the deficit dropped to half this rate, and in the remaining six months of the year the deficit vanished and a small surplus emerged. This is undoubtedly one of the most violent fiscal shifts in our history.

Second, the Federal Reserve authorities maintained steady pressure on bank reserves during 1959. Bank credit—that is, the combined loans and investments of commercial banks—rose at a subdued rate. The money supply—that is, the sum of demand deposits and currency in public circulation — stopped rising. The price of money in the meantime moved up sharply. In fact, the advance of long-term interest rates after mid-1958 was faster than in a comparable stage of any business-cycle expansion during the past century.

Third, while the legislative ceiling on interest rates of new government bonds prevented the issuance of long-term securities, the Treasury still managed the public debt with little resort to the assistance of commercial banks. The so-called "Magic Fives" were merely the most dramatic instance of a willingness on the part of the Treasury to pay the price that was needed to place new issues in the hands of investors who would pay with money they already had instead of with newly created cash.

Fourth, the Congress passed the Landrum-Griffin bill which set stiffer standards for the internal management of trade unions than was generally expected. While this legislation will not of itself have any direct effect on wage bargaining, it has been widely interpreted as a reminder to trade unions that their conduct is subject to the control of law and that the government may need to take drastic steps in the future to curb their power to push up costs.

Fifth, many business firms resisted with unaccustomed vigor the demands of trade unions for higher wages and larger fringe benefits. Some—although less certain — signs also appeared of greater moderation in the demands of trade unions. The long and agonizing steel strike ended with a settlement requiring an increase of hourly labor costs which exceeded the expected increase of over-all productivity. Nevertheless, labor costs per hour will rise much less under this agreement than they did under other steel agreements of the post-war period.

Sixth, the steel companies broke with the practice, which had developed in recent years, of raising prices when a general wage increase is granted. Whatever may happen to the price of steel in the future, it is no higher today than it was before the wage settlement was concluded.

These vigorous expressions of public and private concern for the maintenance of a stable dollar proved effective in quieting fears —or, we may as well recognize the variety of human nature, in disappointing hopes—of inflation. Meanwhile, other developments in the private economy contributed to a change in outlook. Advances in industrial productivity as a rule are rapid in the early stages of a business expansion and this again happened in the closing months of 1958 and the first half of 1959. Besides, ample productive facilities in many industries, keen domestic competition, and stiffer foreign competition helped to keep prices down.

Belated Stock Market Recognition

The net result has been that the average level of wholesale prices has been practically stable for two years and the level of consumer prices has risen only a little. For a time the stock market ignored the behavior of commodity markets and the anti-inflationary measures that were being taken by both the government and private industry. Over a large part of last year the stock market still reflected, besides improvements in the general economic situation, the widespread expectation of progressive inflation. Of late, however, stock prices have declined significantly

Continued on page 32

Semiconductors Forge Ahead Permitting Electronic Gains

By Herman Fialkov, President, General Transistor Corp.

Insight into the various aspects of the forward moving semiconductor segment of the electronics industry shows how difficult it is to guess what will be the total demand. Mr. Fialkov surveys the entire field, explains how U. S. manufacturers will be able to compete against imports, and notes how rapidly costs have declined with progress made.

In the popular mind, at least, electronics, semiconductors and miniaturization are practically synonymous. Actually, of course, this is not so. The electronics industry as such currently is measured in terms of $10 billion a year, while semiconductors constitute a market of around a half-billion dollars. In terms of publicity, however, semiconductors, the transistors, the diodes and their kin, hold the glamour spotlight and certainly get far more than 5% of the attention.

Herman Fialkov

This much of the popular notion is true; semiconductors have made possible the fantastic miniaturization that has marked Space Age technology, and the end is not in sight. This is as true for the unbelievable instruments that man is flinging into space as for the television set in your home or computer in your office.

It may take a while to filter down, but the knowledge that made possible the Tiros weather satellite with its remarkable seeing eyes will, before long, be applied to everyday electronic applications. When you consider that the entire semiconductor industry is only 12 years old, concepts of "a while" must undergo some changes, too. In electronics, the future is upon us.

Intriguing names such as transistor, "mesa" diode and, more recently, "tunnel" diode have helped to raise semiconductors in the public's fancy. What is a semiconductor?

Explains Semiconductors

Simply and not too technically stated, a semiconductor is a material—germanium and silicon being the chief examples—capable of carrying a current of electricity, of controlling its direction and of amplifying it. It has been said, not too accurately, that transistors do the work of vacuum tubes. What is wrong is the implication that transistors can replace tubes—that any time a tube wears out you can simply drop a transistor into its place. What is right is that transistors can perform the functions of tubes in circuits designed for transistors, and that many, many circuits — many of which might not otherwise have been possible—have been designed around them. Thus it is possible to fashion a television camera for a tiny earth satellite capable of photographing the ground from 400 miles in space. Thus has it been possible to design the complex, versatile and wonderful computers that have made possible the data interpretation at the heart of the Space Age.

Thus has it also been possible to bring the marvel of miniaturization into the home in such forms as transistorized radios, tape recorders and more recently ultrasonic cleaners.

Molecular Electronics

Now we stand at the threshold of a still new concept, molecular electronics. Not only are our already tiny semiconductor devices getting smaller, they are becoming the circuits rather than parts of the circuits. This eliminates connections, the weak links of conventional circuits, and tends to make the reliable even more reliable.

What does this mean industrially? The semiconductor market was placed at $400 million last year. My estimate for this year's sales is $600 million. There are predictions that the figure will reach a billion dollars by 1963. The electronics industry has a habit of outdistancing its prophets, and the semiconductor segment of the industry is no exception.

A small computer may have more than a thousand transistors in its circuitry and several thousand diodes. Can anyone really guess at the total demand for computers? Transistorized TV is in its infancy. How many new semiconductor devices will be commonplace a decade hence? At our current rate of acceleration, even a transistorized computer would be hard put to give us the answer. The semiconductor industry itself is hardly more than a decade old.

The Military Demand

Last year, the military accounted for 35% of the semiconductor market. This segment is increasing and soon will represent 50%. The industrial share, now between 40 and 50% will drop only slightly, with the real reduction in share being in the entertainment field.

This does not, however, mean a reduction in use in the industrial or entertainment field. Actually numbers of units purchased for these fields will increase, the change being only in relative share of the market.

Much of the growth is attributable to the demand of the military for smaller, faster and more reliable electronic gear, equipments ranging from communications sets to the brains of missiles. In the race for space, cost is not as important, perhaps, as in civilian uses, because so much of what is being done is in the pioneering stage. But the nourishment given the electronics industry by military funds has made possible the cost reductions that have brought electronics within the reach of business and the homeowner.

Less than two years ago, a switching transistor cost something like $3.50. Today it is around $2.50. Another cost $100 when introduced four years ago. Today it is less than $7. Junction transistors that once cost $100 can now be bought for 50 cents. Already the new tunnel diode, originally relatively high priced, is falling as engineers perfect its use, and rising demand incites production economics.

Diodes are a kind of electrical gate. Senior members of the semiconductor family, they are used in prodigious quantities. The tunnel diode, the latest of the group, holds vast promise.

While demands for tunnel diodes are not heavy now because engineers are still learning how to use them, the picture should change considerably by next year. The tunnel diode is expected to assist greatly in the general trend toward less expensive business machines, to more compact communications equipment and even to better fringe area television reception.

Among the advantages of the tunnel diode is its ability to outfunction even transistors at more extreme temperatures. Tunnel diodes are much faster than many types of transistors and use a great deal less power.

But just as transistors have by no means eliminated the vacuum tube, so the tunnel diode will not replace the transistor. In short, each semiconductor device has some function it can perform better, or for which it is more economical.

Transistors, which behave like electrical valves, are a prime example of the experience of the semiconductor industry. At first they were very expensive, practically custom-made items. The production process was one of delicate, diligent handwork. Standardization — that is, being sure one unit would have the same characteristics as the next—was difficult. In the manufacturing there was a high percentage of rejects, a factor that obviously kept prices high.

With increased demand came increased research and new producers entered the field. Methods of producing crystals of the semiconductor materials improved. The ability to control impurities in the crystals, the key to semiconductors, leaped ahead. Production moved into the automatic stage. Yield improved. And with each advance, there was a price decrease.

Imports from Japan and other foreign sources pose a competitive threat to domestic producers, but the introduction of automation, plus quality and dependability standards and the research maintained by U. S. manufacturers are providing an excellent defense against this competition. To date, foreign units appear mainly in pocket radios.

SECURITY SALESMAN'S CORNER

BY JOHN DUTTON

Knowing Customer's Temperament an Important Aspect of Salesmanship

It is not enough to know securities—a good salesman also knows his customers. The emotional makeup of different people is closely tied in with their investing pattern. You can hardly expect a nervous, action craving speculator who looks at the paper every day to be satisfied with a slow moving, substantial, income producing investment. Nor will he be satisfied with a long-term growth situation that takes several years to develop, unless of course, there is a steady, if uneven, upward move in the price of the stock. Conversely, an investor interested in stable income and high quality issues will be very uncomfortable with even a small investment in some possibly worthwhile but unfamiliar speculation.

Salesman Had Good Intentions

To illustrate the way these situations often develop, there was an individual with about $90,000 invested in a very good list of high grade common stocks who opened an account with a firm that was new to him. He had moved from another city and he discussed his entire list with the firm's representative when he gave him an order for 100 more shares of a stock which he already owned. It had declined in price and he decided that he should own another 100 shares at the lower level.

The customer explained that he was semi-retired. He said that he was interested primarily in receiving his income of about $80 a week from his investments. He mentioned that he was a very conservative individual who was never interested in making a large financial success or in living high. His investments represented the savings that he had accumulated and with some other income he could live very well. He made the first purchase and then he would drop in at the broker's office several times a week, look at the board, and discuss his stocks briefly. Although he had bought for investment he watched daily fluctuations carefully and showed some concern when one of his stocks would have a temporary sinking spell. He gave all the indications of a man who would not be comfortable when taking "risk." Some people are definitely not risk takers.

After about a month of becoming acquainted with this customer, the registered representative who handled his account became interested in an Over-the-Counter stock that was selling at what he thought was a very attractive level. He looked into the background of the company, studied the stock and began to recommend it to his customers. It had a good dividend record and appeared to have a promising future. Meaning well, he suggested the purchase of 100 shares around 18 to this customer. Unfortunately, there was a decline in the market price of the stock to around 14 soon after the purchase was made.

From that time on this customer has been worried and fretful. Even though the investment was very small compared to the value of his entire account; despite the income return of about 5% he will receive and certain other plus factors that augur well for the future, this man is not comfortable. People who do not have the temperament for new ideas and securities that are off the beaten path should not be tempted. Some of us wear one size shoe and some another.

Now With Sutro

(Special to THE FINANCIAL CHRONICLE)

SAN JOSE, Calif.—John I. Johnson is now affiliated with Sutro & Co., 55 North First St. He was formerly with the San Jose Investment Co., Inc.

With Estate Securities

(Special to THE FINANCIAL CHRONICLE)

DENVER, Colo.—Eugene A. Vallow has been added to the staff of Estate Securities Corp., 1600 Ogden St. He was previously with Allen Investment Co.

Broadcasting: Course Ahead

By David Sarnoff,* *Chairman of the Board, Radio Corporation of America*

Pioneer industrialist offers a first step proposal to bridge the widening gulf of misunderstanding and mistrust directed at the radio-TV industry. He notes errors made are not irretrievable but warns, however, that the passage of laws requiring regulation and control would be an irreparable error. The primary needs are found to be these: encouraging greater selectivity on the part of the viewer; no censorship; improve and diversify the quality of mass appeal programming; and use of technical improvements to provide channels supplying small audiences with special educational, scientific and cultural programs. As an initial step, Brig. Gen. Sarnoff calls for annual, off the record assemblies patterned after the American Assembly of Arden House to analyze the role of TV and ideas for improvement.

Since the storm broke last October in Washington, I have remained silent publicly, not with the thought of remaining aloof from the unpleasant though justified revelations, but because I realized that the defense of the industry's position was in the hands of men like Dr. Frank Stanton, my son, Robert, and other capable leaders who hold the reins of day-to-day operations. But if I am to be responsive to your theme of "Broadcasting's Unlimited Horizons in the Electronic Age," I cannot ignore events and proposals that threaten to make more remote, or even to blot out, the most promising of those horizons.

David Sarnoff

In venturing into this area of controversy, I take as my guide an old Arabian proverb: "Wisdom consists of ten parts — nine of which are silence, and one of which is brevity."

My nine-tenths of silence will apply to the voluminous and expert testimony of industry leaders on the many complex problems of broadcasting which have occupied the attention of everyone from Congress and the White House to the humblest viewer. The industry's basic presentations require no repetition by me—other than my strong endorsement of the stand that more laws and more regulation can only mean less freedom and less freedom can only mean less progress.

My one-tenth of brevity will be devoted to a personal appraisal, based on observation of this industry since its inception, of the present climate, of the dangers growing out of that climate and of the prospects for the future, both in terms of technology and in terms of service.

In evaluating the industry's present public stance, I believe we can—if we cut through the rancor of recent events — find more areas of agreement than of disagreement with reasonable people in all walks of American life.

First, there must be very few, even among our most truculent opponents, who would suggest that television be abolished, or who honestly feel that this would be a better world if television had never been invented. No amount of temporary quiz tarnish can obscure its position as a remarkable new art, a totally unique form of communications with an unparalleled capacity to please and to irritate, to stimulate and to anger, and above all, to capture and to hold, the interest of an entire nation. I cannot believe that the American people will ever permit this child of infinite promise to be thrown out because its bathwater once became murky.

Second, the record is now clear, and it will become even clearer as emotions subside, that the responsible men in this industry had no part of and never attempted to defend "rigging" and "payola." They have moved with dispatch to install appropriate administrative machinery to safeguard both the public and the industry against deception wherever it might crop up in the future; and have cooperated unstintingly with the Congress and the regulatory agencies.

While it is never pleasant to see one's linen on public display, I believe the industry will one day be thankful for the spotlight thrown upon its shortcomings by the authorized legislative and investigative arms of the government.

Third, the broader indictment of television—the indictment of its mass appeal program service—will sooner or later come into focus for thinking people as an indictment not just of television, but of the entire society of which it is a part. Violence on the home screen finds ample companionship in the lurid headlines on the front page. Mediocrity is no stranger to the theatre or to the movies. The great moment of art is the rarity, not the rule, whatever the forum. One of television's needs—and it seems to me not an unreasonable one—is to be measured by the same criteria that apply to others.

Oliver Wendell Holmes was a master of judicial summation and he probably would have described television's present difficulties with one of his favorite phrases: "If you want to live without trouble, you'll have to die young."

But television's trouble today is not the threat of a youthful death; its trouble is its youthful growth. What Dr. Zworykin first showed me, it is now clear, was really an electronic thyroid!

A decade ago, there were 50 television stations on the air. Today, there are well over 500.

A decade ago, there were about one million television sets in American homes. Today, there are more than 50 million.

A decade ago, advertising expenditures on television were about $60 million annually. This year they are expected to surpass the $1½ billion mark.

These figures are well known to all of us, but to me their current significance is more philosophical than statistical. Considering the tempo of television's growth, the ceaseless demand for talent and material to supply a medium that operates every day almost around the clock, the demand for improvisation, the disparity of audience taste, I find it remarkable that television has made as few serious errors as it has; and that the errors, serious as they were, have not been irretrievable.

There is one error, however, that could be irretrievable.

Opposes More Regulation

It is an error that would be easy to commit in these days when the very air itself is heavy with hostility and with clamor for change. It would be the error of acquiescence in any of the proposals—well intentioned or otherwise—for more laws, for more regulation, for more control of broadcasting.

Such proposals are often accompanied by a disclaimer of any desire for government censorship of programing. And with many of them the end in sight is the laudable one of improved programing. But it is the means proposed, not the end, which can place broadcasting in serious jeopardy. Freedom is not divisible. It can have no meaning if offered in a legislative or regulatory strait jacket, no matter how attractively packaged. As Justice Brandeis once observed: "The greatest dangers to liberty lurk in insidious encroachment by men of zeal, well meaning but without understanding."

Of course, there are some people who abhor censorship generally, but who seem to favor "a little censorship," if it applies only to television. In my judgment, they trip over their own semantics. Either you have censorship or you don't. Either it applies across the boards or not at all. How can one with reason relate it to a non-subsidized communication medium which uses the public airways to reach the people free of charge, and ignore the other media that make a circulation charge and, in addition, use public subsidies to reach those same people?

Any fair debate on censorship and more laws and more regulations cannot be confined to a one-medium front. The issue is far broader than one or even all media; it is as broad in fact as democracy itself.

Since our society was founded, the promise of improvement through authoritarian means has tempted every institution at one time or another. And it is the strength of our society that this lure has always been resisted, that the promised end of quick and easy improvement has not been judged worth the dictatorial means of shortcut. We, as a nation, have felt compelled more than once to uphold this belief on the battleground.

But television cannot expect to wage its battles from within the haven of democratic tradition unless it contributes in full measure to the upkeep of the haven. The tithe of freedom is continuing self-improvement, and with television it must be paid in two areas—in improved program service and in technological advances which can make profound contributions to the breadth and diversity of that service.

Influence of Technology

The promises of television technology ,of course, are infinite and the speeches devoted to them in recent years just as infinite. I will single out just four examples to illustrate how technology can influence the caliber, range and reception of television programming in the years ahead.

(1) Man-made satellites will soon serve as mirror-in-the-sky relays for global television. The electronic hardware is now ready; it awaits only the proper rockets for the thrust into orbit. In a functional sense, this system can fulfill one of television's oldest dreams: on-the-spot live news coverage of events anywhere in the world.

(2) Automatic and instantaneous electronic translation techniques are being devised, which will enable people of all nations to converse across the barriers of language. The Tower of Babel again will crumble and this time in the most final way possible.

(3) Advances in basic circuitry and miniaturization will permit television receivers of small-enough size to be carried inside your shirt pocket. Vast new outdoor audiences will thus be within reach of the TV broadcaster, particularly during the attenuated summer viewing period. Clipped outside the pocket, of course, will be radios of ball-point-pen size and design.

(4) Improvements in broadcast transmitting techniques and the practical use of extremely high frequencies will enable maximum utilization of the spectrum. The availability of vastly more channels will open the way for a whole range of new services for those with specialized minority tastes and interests.

Urges Better Viewers' Selectivity

Each of these technological advances—and many others in various stages of development—promises, in one form or another, to aid the broadcaster's efforts to improve and diversify his service. But the broadcaster can afford no dalliance while awaiting their arrival. The challenge of elevating programming levels is pressing, and I believe that it can best be met, in terms of the mass service, through an intensified effort to encourage *selectivity* in viewing.

In other media, the process of selectivity is taken for granted. People do not go to every movie; they choose the ones most appealing to their tastes. They do not read every magazine or every book; again, they exercise the privilege of choice.

Is it not, therefore, unreasonable for anyone to expect to turn on his television set, at any hour of the day or night, and immediately find something to his liking? What such a person is really looking for is a full-band service of narrow-band design, with every program tailored to his own personal interests. This, if I may invoke a familiar phrase, is incompatible.

I have a lot of sympathy for the professional critics who by the nature of their profession, are denied the opportunity of selectivity. Their assignment is to watch and judge hour after unbroken hour. If I were obliged to view or listen to nearly everything, so indiscriminately, night after night, I am afraid I would soon begin to hate it.

But the average viewer *can* be selective. Whatever his interests, he can find—if he makes the conscious effort—programs in the course of a week's schedule that will have direct appeal to him.

Logic compels the industry to encourage selectivity, for it is the only sound way to keep in constant movement the cycle of program improvement. Almost by definition, the selective viewer will seelct the best within his range of interest. As the audience for the best grows, so will advertiser interest grow. As sponsorship of the best grows, so will the volume of the best be increased, and so will the desire to range afield for new categories in which to provide the best.

In summary then, the primary demands of the hour are these: to resist any form of direct or disguised censorship, to defend the freedom of broadcast communications won over 40 years; to improve and diversify the the quality of the mass appeal program service.

Yet, imperative as they are, they should not divert the industry from another demand that can also bear decisively on its character and its aspirations for the future.

Around the world of commercial television today an intellectual curtain is descending. A minority of American society, articulate, intelligent, highly influential, has woven this curtain because of a deep dissatisfaction with the most visible element of the service—the so-called popular or mass appeal programs.

I do not believe television will ever alter this group's deep feeling of antipathy toward popular programming. Nor do I believe that selective viewing, within the framework of a mass-oriented service, will ever give the minority a complete sense of fulfillment. Certainly, the quality of popular fare can be improved substantially, and the scope of programming can be broadened. But the patrons of the specialized arts will, quite naturally, still

Continued on page 47

Casey V.P. of A.C. Allyn & Co.

J. D. Casey, Jr. has been elected a Vice-President of A. C. Allyn and Company, Incorporated. Mr. Casey makes his headquarters at the firms New York office, 44 Wall Street.

MUTUAL FUNDS

BY ROBERT E. RICH

Stocks — Not the Market

A sage Wall Streeter, who is called upon several times a day for an opinion of the market, now sums up his attitude with this apt observation: "I just don't think about the market—I think about stocks."

Philadelphia's Wellington Co. has made a study that would indicate this has been a market of stocks for 13 long years. Going back to May of 1946, a generally recognized bull market high point and marking the time that this market cycle started, the Wellington people note that the market (as measured by the Dow Industrials) has risen from 212 to 679, yet few individual stocks have matched this gain. Indeed, many have sustained declines. The study finds:

"More than one-fourth of individual listed common stocks, in fact, went down despite the substantial upsurge in 'the averages.' Specifically, 196 issues (or 29% of the 685 common stocks listed on the New York Stock Exchange all during the period) declined in price from their 1946 highs to the end of 1959."

Yet market-letter writers and managers of investment portfolios go on telling us what **the market** can be expected to do next month, next year or even during the "Soaring Sixties". Their observations are interesting, if not helpful. But their views on **stocks** could be interesting and helpful, not merely to the public but to themselves as well. Few people remember and even care what the Dreyfus Fund's Jack Dreyfus thought about the market a few years ago, but his frequently stated views on Polaroid are something else again.

Everybody knows investment companies are buying—and selling too. But more to the point is **what.**

It is of more than passing interest to learn that Adams Express and its subsidiary, American International Corp., increased their holdings in five companies and eliminated holdings in two others during the first quarter. Of particular interest is the information that purchases included 6,600 shares of United Gas by Adams and 4,300 by American International; 2,500 shares of Newmont Mining by Adams and 2,200 by the subsidiary; 1,900 shares of Chromalloy by Adams and 1,311 by its subsidiary, and smaller purchases by both companies of Truax-Traer Coal and United Electric Coal. Both companies eliminated from their portfolios American Can and Eli Lilly Class B.

General American Investors reveals that during the same period it bought 2,000 shares of International Nickel and 3,000 Wyandotte Chemicals while selling 6 500 shares of American Natural Gas.

Keystone Custodian Fund, Series K-1 discloses that between Sept. 1 and Feb. 29 it added such common stocks as Allied Stores, American Sugar Refining, Kennecott Copper, Maytag Co. and Time, Inc. At the same time Brown & Bigelow, General Outdoor Advertising, May Department Stores and Singer Manufacturing were eliminated.

The Income Fund of Boston reports that in the quarter ended Jan. 31 it bought 1,500 shares of Bond Stores, 1,000 Niagara Mohawk Power and 2,000 Socony Mobil. It also increased its holdings in Central Vermont Public Service from 7,000 to 12,000 shares, in Drewrys Ltd. U. S. A. (a brewer) from 15,000 to 17,600, in General Outdoor Advertising from 5,000 to 13,000, Hartebeestfontein Gold Mining, Ltd. from 8,000 to 18,000, P. Lorillard from 4,000 to 9,000, Philip Morris from 10,000 to 12,000, New England Electric System from 13,000 to 20,000, Rockwell-Standard from 8,500 to 11,000, Truax-Traer from 7,000 to 10,000 and United Merchants & Manufacturers from 6,000 to 10,000.

At the same time The Income Fund of Boston was eliminating such common stocks as Associated Dry Goods, Deere, Ekco Products, First Boston Corp., S. S. Kresge, Mack Trucks, New Britain Machine, Pittsburgh & Lake Erie Railroad, South Penn Oil and Swift & Co.

Also interesting is the obvious coolness of the funds toward steel shares—a condition that has prevailed for many months. However, there is widespread belief that this group is "pretty well liquidated." Also worthy of note, even at the risk of being repetitious, is the growing interest in foreign equities.

A broad-based advance in the stock market is a possibility with which investment managers must always reckon—or a broad-based fall, for that matter. But the prospects are for a continuance of the trendless markets that call for shrewd judgment in evaluating stocks—not the market.

The Funds Report

Net assets of **The Dominick Fund, Inc.**, closed-end investment company managed by Dominick & Dominick, were $35,871,263, equal to $20.99 per share of capital stock outstanding at March 31, 1960. This was after deducting the dividend of 12 cents per share payable on April 15. On March 31, 1959, net assets were $36,534,935, equal to $22.01 per share. At the end of 1959 net assets were $22.33 per share, adjusted for dividends payable in February 1960.

At the end of March quarter holdings or common stocks comprised 86.2% of total assets as compared with 89.3% at the 1959 year-end and the same percentage at March 31 last year. A major change was made in the steel and iron classification, with holdings reduced from 9.8% as of Dec. 31, 1959, to 2.8% on March 31, 1960. During the three months ended March 31, 1960 the company acquired new holdings of Johns-Manville, Ampex, Texas Instruments, Campbell Soup and H. J. Heinz, and added to its holdings of U. S. Plywood, Crown Cork & Seal, R.C.A., U. S. Gypsum and Merck. Common stocks sold included Ingersoll Rand, Outboard Marine, Bethlehem Steel, Armco Steel, Republic Steel and Great Northern Paper.

* * *

The Energy Fund reports major changes in its portfolio during the quarter ended March 31. New commitments include: 4,000 shares of American Telephone & Telegraph, 4,000 Consumers Power, 1,000 Data Control Systems, 2,000 Electric Storage Battery, 1,500 Hewlett Packard, 2,000 Houston Lighting & Power and 200 Kalvar Corp. Increases include 2,000 General Public Utilities, 1,700 Litton Industries, 1,500 Tampa Electric, 500 Texas Instruments and 4,200 United Utilities. The fund meanwhile eliminated holdings in Atlantic Refining, General Dynamics, Halliburton Oil Well Cementing, Hermes Electronics, Pechiney and Superior Oil Co. (Calif.).

* * *

Net assets of **Stein Roe & Farnham Balanced Fund, Inc.** rose to $42,921,660 on March 31. Net asset value per share was $35.21 on 1,218,893 shares on March 31, after a capital gains dividend of $2.28 per share paid in January.

* * *

Chemical Fund, Inc. reported total assets of $249,610,658, equal to $10.68 a share at March 31. The new asset total compares with $265,973,763, equal to $11.61 a share on Dec. 31, 1959, and to $214,908,581, equal to $10.39 a share, on March 31 a year ago.

During the first quarter, the fund eliminated its holdings of B. F. Goodrich Co., Gulf Oil Corp. and Standard Oil Co. of California. Initial acquisition of Upjohn was reported, and the fund's holdings of Royal Dutch Petroleum were substantially increased.

* * *

Investment assets of **Tri-Continental Corp.**, the nation's largest diversified closed-end investment company, showed resistance to the general decline in stock prices, and net investment income was at a record high during the first three months of 1960, according to the corporation's first-quarter report. Francis F. Randolph, Chairman, and Fred E. Brown, President, declared in the report that while stock prices in general dropped 9.2%, in terms of the widely-used Dow-Jones Industrial Average, during the first three months of 1960, Tri-Continental assets stood at $394,142,866 on March 31, down only 4.5% from the start of the year. This resistance is "as might be expected of a managed portfolio which includes fixed-income securities as well as common stocks," the executives said.

Assets per common share outstanding at March 31 were equivalent to $46.85, as compared with $49.68 three months earlier. Assuming exercise of all warrants, assets per common share stood at $42.77 at the end of the quarter, down from $45.20 at Dec. 31, 1959. "There was no change in over-all investment policy during the period," the Chairman and President declared, and Tri-Continental "continued to search for equities of companies in a strong position and with favorable intermediate and long-term prospects that do not appear over-valued in current markets." The corporation's common stock investments accounted for 86.4% of investment assets at the end of the quarter, about the same proportion as at the start of the year. Industries in which the five largest common stock investments were held on March 31 were public utilities, representing 20.8% of common stock holdings; electrical and electronics, 10.2%; steel, 8.2%; oil, 7.9%, and chemical, 7.7%.

Common stock holdings were increased by the purchase of 27,000 shares of Allied Chemical and 22,000 shares of Dow Chemical, and 6,900 shares of Burlington Industries were acquired through the conversion of debentures into common stock. Holdings were reduced by the sale of 18,800 shares of Anaconda common and 30,000 shares of Westinghouse Electric common. An investment in 25,000 shares of common stock of Deere & Co. was eliminated.

Louis McClure Mgr. of Shearson, Hammill Branch

TAMPA, Fla.—Louis C. McClure has become associated with Shearson, Hammill & Co. as manager of their new branch office in the Tampa Terrace Hotel. Mr. McClure, who has been in the investment business for many years, was formerly President of Louis C. McClure & Co.

Form Acme Securities

Acme Securities Corp. is engaging in a securities business from offices at 527 Madison Avenue, New York City.

THE MARKET . . . AND YOU

BY WALLACE STREETE

Hopes that a spring rally would take hold in the stock market were dashed this week when the list turned reactionary after several drab sessions that were essentially a stalemate.

* * *

Electronics bumped into profit-taking that gave them a rough time of it and even the old-line companies that had joined in the electronic spree, such as Radio Corp. and American Telephone, were also a bit heavy after they had pushed to prominence on the new highs list. For AT&T it was the best price reached since 1929.

* * *

The blue chip laggard was du Pont after reporting a slight dip in earnings for the first quarter. Some sour performances by this quality item carried it more than half a hundred points under the high of earlier this year and even more from last year's peak.

Rough Handling of Motors

Motors had some rough handling at times, with Ford virtually all the way back down the ladder from its peak posted earlier this year. Among the newcomers to the spotlight on good demand was Wesson Oil when it was divulged that it was talking merger with Hunt Foods. Up to here Wesson has been able to carve out a range of only a bit better than half a dozen points. Its one-day gain on the news doubled its 1960 range in short order.

* * *

The technical indicators were confusing. Volume, for example, continued to run at a subnormal level to keep the market's future clouded. The slight increase in turnover on up and off days was too small to be conclusive.

Good action by one or two of the components of the Dow Jones Industrial Average gave it a misleading appearance, too. It was reasonably stable in the last two weeks while the daily declines ran more than the advances with monotonous regularity. And new 1960 highs outpaced the new lows more times than not with much the same persistence. To find a pattern in all this called for mostly wishful thinking.

Interest in Electronics Issues

Individual situations were much more capable of analysis even, in cases like the electronics, where a few of the group have already shown sterling price action. The general expectation is that the entire electronics business is in for a vast expansion. And some items in the section haven't yet gone in for excessive price action.

Clevite Corp., a relative newcomer to the electronics business, has had a rather mundane trading life perhaps because it is still considered an auto supply company. The company posted record earnings last year, in large part due to its ability to turn the electronics work into a good profit segment. Its electronic activity is showing substantial sales increases this year which, with an improvement in auto sales this year, could add again to this year's results. Together, another record year for sales and earnings seems indicated.

Unlike some companies where dividend payout is moderate, such as is the case with Clevite, hopes of more largesse are not current. For one, the company maintains a strong cash position, and is busily expanding in transistors and electronic research. These preclude any dramatic dividend policy shift.

But the market's penchant for electronic growth situations minimizes the 2½% yield of Clevite. Growing recognition of its role in this busy field makes it a candidate where possible capital gains are viewed as far more important than yield.

* * *

Even in an issue like Texas Instruments, which ran from less than 16 in 1957 to 170 last year, and above 200 this year, debates rage over the relative values. Against last year's earnings of $3.59 the stock's price looks high. And expectations of new highs, or around $5 a share this year, don't justify the price tag against conservative yardsticks.

But some estimates are that Texas Instruments' expansion program last year cost between $7 and $8 per share, which makes the reported earnings an inaccurate measurement. The company is the most highly automated one in the industry. It is perfecting a new type of combination unit to gather the functions of several electronics devices in one wafer which costs only a tenth as much to manufacture, offers other advantages including miniaturization, along with increased reliability. And the fact that International Business Machines chose Texas Instruments as its transistor supplier is a compliment that speaks well for the company.

Mundane Item

Raytheon is also one of the more mundane items in the electronics lineup. The company has had its profit problems which have kept the market price of the stock restrained. It is one of the most diversified and integrated companies in the electronic field, with a vast research program underway. And it is a well-known name in the forefront of the science age. In its favor is the fact that its rough course, which could be mostly behind it now, has cut the price to around two-thirds of the 1959 high. Furthermore, it has one of the lowest price/earnings ratios in the field and it wouldn't take much improvement in its subnormal profit ratio to show a large earnings increase.

* * *

A company in a different line that has had its rough times — and reflects it — is Koppers Co. All the companies that were involved with heavy construction projects suffered through 1958 and 1959 and the price of Koppers shares fell to almost half of the 1956 peak. Last year's new business written by the construction end was around four times the new orders of 1958, which means that sales in the future should be far brighter. The company reported a 50% jump in sales for the first two months of this year, so has turned something of a corner. It has even intimated officially that better dividend action is to be considered at the May meeting. If the current $1.60 rate is lifted to $1.80, a return of more than 4¼% would be available. And if a $2 rate is set, the yield runs above 4¾%.

* * *

Revlon, Inc., has had the adverse effects of the TV quiz show fiasco to contend with, but seems to be shaking them off finally. It was able to nudge to a new 1960 high to start off the week.

But the chagrin over the quiz shows obscured the fact that Revlon is a consistent and imaginative builder of sales and earnings, both setting peaks last year in fact. In the last decade, on a sales increase of not quite eight-fold, the company was able to increase net earnings by nearly 10-fold. The 12-times profit/earnings ratio on last year's results, and even lower ratio on anticipated results for this year, don't jibe with a company of such demonstrated growth capabilities. Its dividend yield of 4% is also above average.

Business Machine Laggard

The laggard in the office machine group would seem to be Royal McBee, busily expanding into data processing equipment. The shares are currently selling at less than half of the 1957 peak of 40. With an expanded line of office equipment now available and three electronic computers, the company was able to make a sharp improvement in profit for the first half of its fiscal year. There is a strong probability that it will double the results of the preceding fiscal year, which were a solid improvement from the token profit reported the year before. So a turn has been made by this company.

[The views expressed in this article do not necessarily at any time coincide with those of the "Chronicle." They are presented as those of the author only.]

Secs. Fund Investors

Securities Fund Investors, Inc. is engaging in a securities business from offices at 30 Rockefeller Plaza, New York City. Officers are N. Marshall Seeburg, Chairman of the Board; Noel M. Seeburg, Jr., President and Treasurer; Justus P. Seeburg II, Vice-President; Christian M. Lauritzen II, Secretary, and H. K. Piper, Assistant Secretary.

Mandell & Kahn Open

Mandell & Kahn Inc. is engaging in a securities business from offices at 1271 Avenue of the Americas, New York City. Officers are Joseph Mandell, President; Bernard M. Kahn, Vice-President and Treasurer, and Paul D. Levine, Secretary. Mr. Mandell formerly conducted his own investment business under the name of Joseph Mandell & Co.

TVA Bond Issue Data Available

A basic data file on the Tennessee Valley Authority's new revenue bond program is now available, according to a TVA announcement.

Copies of the publication, "Basic Data on TVA and its Revenue Bond Financing," may be obtained from the Director of Information, Tennessee Valley Authority, Knoxville, Tennessee.

Congress last year authorized TVA to use revenue bond financing for new power facilities required by the growing use of electric power in the TVA service area.

Sale of the first issue of TVA bonds is scheduled this fall. Within a few years the amount of bonds outstanding is expected to approach $750 million, the ceiling set by Congress.

The basic data file describes the TVA power system, its operations and service area, and provides details of the bond financing legislation.

Conboy Heads Department for Reynolds Co.

SAN FRANCISCO, Cal.—Richard O. Conboy, Jr. has been appointed manager of the Municipal Bond Department of the San Francisco office of Reynolds & Co., 425 Montgomery Street, according to James L. Murphy, resident partner.

Mr. Conboy was formerly associated with R. D. White & Co., New York brokerage firm, as a Municipal Bond Specialist.

Burt Beck Fisher, Jr. and Peter J. Wardle have been appointed registered representatives in the San Francisco office, it is also announced.

E. F. Hutton Adds

(Special to The Financial Chronicle)

LOS ANGELES, Calif.—Harrison T. Segale has become connected with E. F. Hutton & Co., 623 South Spring St. He was formerly with Shearson, Hammill & Co.

Joins Shearson Hammill

(Special to The Financial Chronicle)

LOS ANGELES, Calif. — Bernard E. Mervel is now connected with Shearson, Hammill & Co., 520 South Grand Ave. He was formerly with Dempsey-Tegeler & Co.

Analysis of the Future of The Electronics Industry

By Robert S. Alexander,* President, Wells-Gardner & Co.

The state of affairs in the production of many consumer applications of electronics, the impact of foreign competition, and the substantial change in the last few years of the military picture is summarized by Mr. Alexander. Despite greater interest in military business now manifesting itself, the contract manufacturer opines that the greatest business opportunities of the future will be in industrial electronics. His figures show that the consumer segment will display only limited future growth, the military aspect will continue its past rapid growth and industrial electronics will offer the most promising prospect.

The volatile electronics industry has grown from a total output of $2.6 billion in 1950 to approximately $9 billion for 1959 and is forecasted to hit $20 billion by 1970. The company with which I am associated is primarily, although not wholly, concerned with the manufacture of consumer electronic products. We are one of the smaller units in the consumer segment of the electronics industry, which in the aggregate has contributed practically nothing to the growth of the over-all industry in the past decade.


Robert S. Alexander

Factory sales of consumer products in 1959 of approximately $1,700,000,000 is only about 13% greater than the $1,500,000,000 achieved in 1950. By contrast the military electronics segment has multiplied nearly ten-fold from about 500 million in 1950 to slightly under $5 billion expected for 1959. The industrial electronics segment has also achieved dramatic growth from about 350 million in 1950 to over $1,500,000,000 in 1959. It is readily apparent from these figures that the consumer segment has been the laggard of the three. Incidentally, these and other figures I mention came from the Electronics Industries Association unless they are otherwise identified.

First I would like to talk briefly about the consumer segment.

The largest single product category in the consumer field is television which hit a never equalled factory sales peak of $1,350,000,000 in 1950. After declining for the past several years to almost half of that figure in 1958, the trend now appears upward. Sales in 1959 reached about $800,000,000 with growth in subsequent years tied pretty much to population increases. A high degree of market saturation has been achieved in the unprecedented short time of about a dozen years for the introduction of a new product. The industry has become highly competitive as illustrated by the reduction in TV set prices from an average factory price of $180 in 1950 to $133 today. This has occurred during a period of substantial wage increases with price increases for most other products being the general rule. The introduction of portables can only partially account for the reduction. Another indication of the competitiveness is brought out by the change in number of TV home receiver manufacturers from over 90 in 1953 to 29 today. Fourteen of these companies now have over 95% of the market. The TV industry appears to have "bottomed-out" and can anticipate future growth to average a few percentage points each year.

The acceptance by the public of color TV will probably continue to be evolutionary rather than revolutionary. According to one estimate, color set sales in 1959 attained a new high of 85,000 sets. When color sales begin to make serious inroads into the approximately 6,000,000 annual black and white set market, most set makers will quickly get into color set production.

When the state of the art advances sufficiently to permit the manufacture of competitively priced truly portable battery operated TV sets, the industry should again advance sharply. The development of a thin, picture-on-the-wall type of display device, to replace the bulky picture tube, will also stimulate the TV market. However, at present these developments are still some years away.

Radio receivers and phonographs constitute the second and third largest categories of electronic products for entertainment. Both markets are about the same size at approximately $380 million each. These classes of products have been with the American public for a long time, and make up some of the most mature portions of the electronics industry. Product innovations such as FM radio and Stereo have been successful in giving a sales spurt to these product categories for the present. It is difficult to foresee the public's likes and dislikes with accuracy; however, it seems reasonable to expect these product classes to grow over the long run at about the same rate as new family formations.

Other important consumer electronic products include tape recorders, garage door openers, and electronic organs with estimated aggregate factory sales of $120 million for 1959. Although these product classes are relatively small they do offer potential for high future growth rates. This is particularly true of the organ market which may reach 200,000 units by 1961 which is double the estimated 100,000 units sold in 1958.

The future impact of Japanese electronic imports will probably continue to be greatest on the consumer segment. They are learning and expanding rapidly, and will undoubtedly attempt to exploit their labor cost advantage as fast as their know how and production capacity will permit. They have already demonstrated their cost advantage and competence in making components of types which have a high ratio of labor to material costs. Their success with transistor radios has been dramatic, and is indicative of the Japanese industry's strong desire to sell complete packaged products rather than components alone. It is difficult to predict how successful they may be with other consumer products, but it is to be expected that they will enter other fields that have mass production opportunities. Although an all transistor portable television is not practical today, it requires little imagination to visualize what the Japanese could do with such a product if it were feasible. The Japanese influence is only one of the factors contributing to the constant flow of changes in the industry.

While the dynamic consumer segment of the electronics industry can be considered a growth industry in comparison with other sectors of the economy, it does suffer by comparison with the military and industrial electronics segments. EIA projections indicate the consumer segment will reach $2.5 billion in 1970.

Now for a few words on the Military Segment.

At present over half of the electronics industry's output goes to the military, and the trend will probably continue upward, reaching 60% by 1965 when military output of $9 billion appears probable. Continued growth to over $12 billion in 1970 is anticipated. This assumes, of course, that we will have only the normal number of cancellations, cutbacks and stretchouts that insert a note of uncertainty in the future of any single weapons program. We can expect that these rather violent repercussions in the short-range business outlook for specific companies will continue. However, the over-all military budget for electronics is expected to steadily increase. Although an end to the cold war could dramatically reduce this forecast, that possibility is not considered a strong probability.

The military picture has changed substantially in the last few years. In earlier years military agencies purchased millions of similar electronic items for a relatively few dollars each. Many companies submitted bids to supply these "black boxes." This type of business was important to my company in earlier years and reached 60% of our sales in 1954. Now that this type of business has largely diminished, it accounts for only about 5% of our sales.

Today by contrast the military purchases relatively few units that may cost millions of dollars each. As a general rule, research and development is needed before equipments can be built. Usually a company that is successful in the conduct of an R & D contract is also successful in getting the first few production contracts for the equipment developed. Unfortunately, more often than not, R & D contracts do not result in production work. To maintain a continuous flow of production work requires that many R & D contracts be carried on simultaneously to insure that at least a few will result in production contracts.

In spite of the negatives of military business, including low profit rates, and at times, the seeming capriciousness of government agencies, military business is apparently quite attractive to an increasingly large number of companies. The substantially greater competition in the field today indicates that a number of companies would like considerably more government business than they are presently getting. I am sure that many of the companies in the field are interested in military business for some of the same reasons that my company is. We feel that one of its principal advantages is that it can help us to maintain technical skills that will be of value to us in the industrial electronics field. Military production also helps to level out the severe seasonal cycles of our consumer products business.

Lastly, I will make a few comments on the Industrial Electronics Segment.

It seems to me that the greatest business opportunites of the future will be in the industrial electronics segment. Here we can expect the most glamorous products.

We now have electronics seeing for us, perhaps better than we can see for ourselves, selecting size and color, seeing farther and seeing smaller items than we can see with our own eyes. We have electronics feeling for us, selecting size, texture and weight. We use electronics to hear for us at levels and frequencies that we cannot detect ourselves. We even have electronics smelling for us, detecting the presence of harmful gases.

Electronics will be harnessed more and more by industry. The electron tube or transistor makes a marvelous employee. It comes to work on time and does not arrive with a hangover. It does not have personal problems balancing its budget or fighting with its spouse. Apparently, its children cause no concern. In fact, very little of everyday life is reflected in the operation of an electronic circuit on a given job. It certainly thinks faster and more correctly than we do even though the scope of this thinking is somewhat limited at this time.

Industrial electronics is still in its early stages of growth but can be expected to really get going in the early 60's. In the main the application of electronics will not be limited to doing a few jobs that have never been done before, but to the performance of hundreds of tasks already being done by other methods. With electronics these jobs can be performed more quickly, more accurately, or more efficiently. As electronics gains greater acceptance by industry, it will lose its identity as a delicately balanced miracle worker and become a highly reliable work saver with applications in virtually all industries. The continuing trend of higher wage rates is a strong growth factor favoring industrial electronics that appears to be built into our economy. The expansion of this segment to $2.5 billion by 1965 and $3.4 billion by 1970 seems a conservative forecast.

By way of Summary.

It appears that in the aggregate the consumer segment can be expected to show only limited growth in the future. The consumer segment has grown from $1.5 billion in 1950 to about $1.7 billion in 1959 and is expected to reach $2.5 billion in 1970. This segment will probably experience the greatest impact from further growth of the Japanese electronics industry. The degree of influence is difficult to predict at this time.

The military segment will continue its past rapid growth rate from $½ billion in 1950 to nearly $5 billion in 1959 to an estimated $12 billion in 1970. This segment will account for over half of the electronics industry for the next decade. Emphasis on research and development will continue and a high obsolescence rate will be normal.

Industrial electronics is the most promising segment for the future, and we can expect to observe its penetration into virtually all industries in the next decade. From a level of about $350 million in 1950, this segment has grown to over $1.5 billion at present and is conservatively forecasted to hit $3.4 billion by 1970.

By adding up the figures for all segments we gain an appreciation of how important to the over-all economy the electronics industry has become. The over-all industry including the replacement parts business has grown from $2.6 billion in 1950 to $9.1 billion at present. Forecasted growth to $20 billion by 1970 indicates that the future impact of the electronics industry on the over-all economy will be even more dramatic than in the past.

*An address by Mr. Alexander as a panel member at a Seminar sponsored by the Professional Group on Engineering Management, Institute of Radio Engineers and the Security Analysts and Stock Br-kers' Associate of Chicago, held at Midwest Stock Exchange, Chicago, Ill.

Form D. J. Hinkley Co.

DENVER, Colo.—Donald J. Hinkley & Co., Inc. has been formed with offices at 215 Denargo Market to engage in a securities business. Officers are Donald J. Hinkley, President; V. A. Hinkley, Vice President; and John N. Groesbeck, Secretary - Treasurer. Mr. Hinkley and Mr. Groesbeck were formerly with Amos C. Sudler & Co.

Prophesies and Realities In the Electronic 1960's

By Robert S. Bell,* *President, Packard-Bell Electronics Los Angeles, Calif.*

Dynamic and influential electronics, drastically affecting every known industry and science, is held not to be an industry but a technology. No matter whether it is an industry or technology, Mr. Bell recapitulates various indices of its growth and predicts, for example, rapid expansion in industrial electronics this year, a strengthening in color TV in the consumer area, and a limitless advance into such new areas as conversion of salt water into fresh water. Nineteen-sixty is said to constitute the start of a decade of electronic "miracles" which will translate many prophesies into realities.

The slogan of our great industry, "Live Better — Electrically," is certainly going to have greater significance each succeeding year of this great decade we are beginning.


Robert S. Bell

The day is coming when practically everything we need to live and enjoy living will be basically electric in nature. The farmer will eat products processed by electronics and the garment maker will wear them. So will everyone else.

We'll drive and fly in vehicles controlled electronically and built of materials, both known and unknown—all produced and fabricated by electronic processes, electronic process controls, or both. We'll live in dust-proof houses built with yet unheard of materials similarly produced and equipped.

Diseases will be diagnosed electronically by advanced computers which will determine the ailment and prescribe appropriate drugs according to a patient's age height and weight, and past medical record since the day he was born. The newest drugs, prescribed automatically, will be processed electronically and possibly even discovered with the help of electronics.

Chemists, metallurgists, physicists and geologists will be assisted by memory drums which store all knowledge relating to their particular science, which I hope will include "instant patents" processed electronically and fed into the machine from Washington every hour on the hour.

While changing or drastically affecting every known industry and science, electronics will find the solution to two pressing problems—smog and fresh water from the sea.

Actually, this dynamic and influential industry of ours is not really an industry at all, but a technology—a complete, although heterogeneous technology ranging from toasters to telemetery—from refrigerators to satellite communications.

Industry or technology—we're a powerful force economically.

Electronics alone will contribute $20 billion to gross national product by 1970. That's $400 million a week, or, on a 5-day office week—$80 million a day.

Dramatic new frontiers were opened last year in 1959, foretelling of even more startling scientific developments in the years ahead. Larger and more complicated satellites were launched. Russia hit the moon and took the first pictures ever taken of its dark side. The U. S. X-15 hypersonic aircraft flew under its own power at 1,500 mph preliminary to a space flight some time this year or early 1961. And seven Astronauts prepared to explore the fringes of outer space. Some 310 jet airliners were delivered to domestic and foreign companies by U. S. aircraft manufacturers in 1959. Another 85 are to be delivered by mid-1960.

In less than 20 years electronics has moved from 49th place in the business world to fifth place, topped only by automobiles, steel, transportation and chemicals. It is the employer of over 1,750,000 people—close to 3% of the total working population.

The fast growing industry continued to expand in 1959 with an all-time high factory sales volume of $9.2 billion, an increase of 16% over 1958. This record will be broken in 1960 by another 10-14% increase.

Television sales will increase to approximately 6,400,000 sets, compared with 5,800,000 in 1959. Another 2,000,000 will reach the used set market by the end of 1960. There will be some 10,000,000 home radios sold in 1960, about 899,000 above 1959. Stereophonic high-fidelity equipment sales should increase by 300,000 units to a total of around 1,800,000.

The wave of continually rising interest in high-fidelity reached boom proportions during the past year and, as yet, the market potential has barely been tapped. The advent of stereophonic sound provides a new, dramatic springboard for bringing added pleasure to the home. There are 26,000,000 homes in the U. S. equipped with some sort of obsolete phonograph. This is the minimum stereo hi-fi potential. Most families enjoying recorded music at home will want the additional enjoyment of stereophonic sound eventually. And many families are becoming phonograph conscious for the first time because of stereo's life-like reproduction.

Color TV volume in 1959 was over $50 million. It should reach $60 million or more this year. I predict that by this time next year color programming by the networks will be improved and expanded. This will continue to increase the demand for color sets and other manufacturers will eventually scramble to get into the business. By then color set prices either will be lower or consumer desire will be higher. Color will represent a large segment of TV business by 1965.

Sees Expansion in Industrial Electronics

Industrial electronics will begin a decade of rapid expansion this year. Whereas total industry volume is expected to double to $20 billion by 1970, industrial electronics (data processing, process control, closed circuit TV and communications) will more than triple to an annual volume of $9 billion, almost half of total industry sales. High cost, which has held back industrial automation, is being overcome by new computer techniques developed for military use. Closed-circuit TV will find increasing acceptance as an industry tool during the years ahead.

The major obstacle of cost in the industrial television field is being rapidly overcome and the development of lightweight portable cameras and transmitters, and even miniaturized television equipment is bringing ever closer the day when human beings may be removed entirely from places where there is danger, remoteness or discomfort.

One of the most important and immediate capabilities of the electronics industry for the coming year lies in the development of communication satellites. It is within the realm of possibility that satellites equipped with electronic coding systems might substitute for, or replace, existing postal, telegraph and radio systems of the world.

Military Purchases

Military purchases accounted for about 50% of industry sales in 1959, or about $4.5 billion. This year it is expected to reach $5 billion, with a gradual rise to between $8 and $9 billion per year by 1970.

Every year the percent of military gear that is electronic grows greater. It now represents about one-third of a defense procurement and can be expected to increase substantially in 1960. Electronic equipment for missiles alone costs around $1.5 billion this past year. Missile electronics will reach $2 billion or more during 1960.

Long range future benefits predictable by the use of electronic devices include an inexpensive mass source of nuclear power. Low cost conversion of salt water into fresh water on a large scale will result from an electronic process. Electronics will play a part in developing new sources of food proteins from the sea, the mass production of appetizing synthetic foods and fully automated housekeeping. The TV set of 1970, exclusive of viewing screen, could dwindle to the size of a fountain pen.

Some of these electronic benefits will come closer to realization in 1960. Right now, for example, electronic measuring devices are being used inside an atomic reactor for the first time. This major contribution to atomic research helps to gather needed information concerning fuel rod materials, which directly affects the efficiency of atomic reactors and the cost of producing atomic power.

The electronic industry carries on a large segment of the research and development activity of the nation. From laboratories will come the many advances needed for defense and space study. Some of the uses to which this new knowledge will be applied will be to bring better health, longer life and a higher standard of living to all people. This year, 1960, starts a decade of electronic "miracles" which will translate many of these prophesies into realities.

*From a talk by Mr. Bell before the Electric League of Los Angeles, March 21, 1960.

Commonwealth Of Australia Bonds Marketed

Morgan Stanley & Co. heads underwriting group offering $25,000,000 20-year 5¼s, priced at 97½% to yield 5.45%.

Morgan Stanley & Co. heads a nationwide underwriting group comprising 64 investment firms which offered for public sale on April 20 an issue of $25,000,000 Commonwealth of Australia 20-year 5¼% bonds. The bonds, due April 15, 1980, are priced at 97½% and accrued interest to yield approximately 5.45% to maturity.

The bonds are direct obligations of the Commonwealth and principal and interest will be payable in U. S. currency. This marks the fourth sale of Australian bonds by a Morgan Stanley group in the United States market within the last two years. In September, 1959 an issue of $25,000,000 of 20-year 5½s was marketed and in April and October, 1958 like amounts of bonds were sold.

Semi-annual sinking fund payments of $675,000 from April 15, 1962 to Oct. 15, 1979 together with a payment of $700,000 on April 15, 1980 are calculated to retire the entire issue by maturity. The bonds are not redeemable prior to April 15, 1970 except by operation of the sinking fund. They are redeemable on or after April 15, 1970 at the option of the Commonwealth at 101½% to and including April 15, 1974 and at decreasing prices thereafter. The sinking fund redemption price is 100%.

Application will be made to list the bonds on the New York Stock Exchange.

The Australian currency equivalent of proceeds of the current offering will be applied toward capital works expenditures being financed under the borrowing program for 1959-1960 approved by the Australian Loan Council for the Governmnets of the Commonwealth and the States.

Funds are required from this program to finance such public works projects as housing, the extension of electric power transmission facilities, the modernization of railroad equipment and the construction of additional water supply, irrigation and sewerage facilities.

The Australian Commonwealth, including the island State of Tasmania, comprises an area of about 2,971,000 square miles—about the same as the United States, excluding Alaska. The major portion of the Commonwealth's industrial and agricultural production is derived from the eastern and southern coastal regions.

The population of the country at Dec. 31, 1959 was estimated at about 10,166,000 compared with 8,045,600 at Dec. 31, 1949, an increase of 26%. Since the end of World War II the Commonwealth has actively encouraged immigration, particularly from Great Britain and Europe.

D. H. Blair Co. Appoints Malone

Thomas Malone, formerly with Gill & Co., has been appointed manager of the trading department of D. H. Blair & Company, 42 Broadway, New York City, money and stock brokerage firm, and member of the New York Stock Exchange and American Stock Exchange, the company has announced.

D. H. Blair & Company is also inaugurating a new executive training program headed by Aaron Korman, formerly with Dreyfus & Co., the company said. According to the announcement, the new training program will include education in account management, syndication, underwriting, money brokerage and other of the various facilities provided by D. H. Blair & Company.

Leason Adds to Staff

(Special to THE FINANCIAL CHRONICLE)

CHICAGO, Ill. — James W. Higgins is now affiliated with Leason & Co., Inc., 39 South La Salle St. He was formerly with Blyth & Co., Inc.

Joins Hayden, Stone

(Special to THE FINANCIAL CHRONICLE)

LA JOLLA, Calif. — William Y. Quinn has been added to the staff of Hayden, Stone & Co., 1101 Wall St.

With R. H. Moulton

(Special to THE FINANCIAL CHRONICLE)

LOS ANGELES, Calif. — John J. Houlihan is now with R. H. Moulton & Co., 510 South Spring St.

What Investor Should Know In Buying Electronic Stock

By Paul B. Wishart,* *President, Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.*

Mr. Wishart's remarks convey a succinct insight into the realities of the electronics industry, in terms of dramatic growth prospects and the pitfalls of losses due to rough, rugged, competitive business and defense contract gyrations. He charts the outlook for the four basic segments of the industry as well as for the industry as a whole, and disagrees with those who believe that in a few years time research and development expense will level off.

When we look for clues to the future of the electrical-electronic industry, one of the most impressive — and perhaps the most significant — barometers is the tremendous amount of money it is pouring into research.


Paul B. Wishart

A few statistics tell the story. From the start of our country in 1776, there has been spent for research and product development of all kinds around $104 billion. Of this total, slightly more than half—or $54 billion—was spent in the last five years. This year, the figure will be in excess of $13 billion.

If we deduct government-sponsored programs, the electrical-electronic industry last year spent around $3.8 billion—or more than all the rest of the industries put together.

Now, I don't say that these figures are right on the button from the point of view of extreme accuracy, but they are within the ball park.

The lavish spending in the constant search for new and better products has caused some to call the electrical-electronic industry "America's idea factory." This spending alone provides a base for believing that the industry should have a good year in 1960 and projecting ahead for the next 10-year cycle, some dramatic progress.

Cautions Investor's Blind Optimism

I believe sincerely this will be the case, but like all generalizations, it can lead you straight into trouble if you are now in this field, if you are thinking of diversifying into the field and probably more importantly if you feel as an investor that you only need to buy an electronic stock and, presto, tomorrow it will sell at 40 to 100 times earnings, or, as has happened recently close at home, 40 times losses.

For, make no mistake about it, this is a rough, rugged, competitive business with product obsolescence coming so fast that only the nimble recapture the costs of developing the last product on the market. The spending of research and development funds to exploit the newer technology is in truth the life blood of every company. But beware of the man who tells you that a few years out, the research and development expense will level off. Actually, in my opinion, there must be inexorable pressure in our industry to increase the expenditure of these funds faster than sales.

To a greater extent than many of us like to contemplate, the government calls the tune, and the missile and electronics programs are subject to wide swings almost daily. These gyrations have and will continue to push many of the smaller electronic contractors into a very deep and very dangerous hole, with the only "out" for many being a consolidation or merger with a source of heavy capital, or a rather bleak profit and loss report.

These forces in 1960 will cause many electronic companies to struggle for survival while paying tremendous dividends for those with good management plus an access to rapidly increasing equity money.

Now for the four specific segments of our industry—

Consumer Products

There will be little, if any, increase in factory sales of consumer electronic products in 1960 over 1959. The marked increase in 1959 over 1958 was due to the great interest in hi-fi, stereo, and FM radio. The next high level will be reached with the mass introduction of color TV, which is not expected in 1960.

Industrial Products

Future growth in the industrial market for electronics is very promising, with inevitable application of military developments to the industrial picture. It is probably in this field that the electronics industry will find its most rapid growth.

The so-called process industries —such as petroleum, steel, paper and the like—already are highly automated. But even so, advances in technology, coupled with the ever-present need to increase efficiency and cut costs, are bringing about great changes. Throughout industry, the big trend today is toward multi-functioning systems that enable a greater number of operations within a given industrial activity to be integrated and placed under centralized control. New techniques and concepts are rapidly developing. One of these is known as systems engineering—that is, the development of complete instrumentation and control systems, rather than separate devices. Another is industrial data-handling, which is the technique of collecting data, automatically converting it to digital form and then printing it out in the form of automatically-typed log sheets or tape recordings. The newest development—and perhaps one of the most far-reaching — is the application of digital computers to the control of industrial operations.

Military Products

A big question mark here is that of government spending; however, even with a reduction in military spending, electronics will not be hurt as much as other areas. At the time of Korea, electronics accounted for 10% of the total military procurement dollar, whereas today electronics is a 20% factor. Of course, Congressional action or public pressure may cause additional spending in 1960 for a crash program or programs designed to bring us to the levels of the Russians in certain space achievements, but the total probably for the first year would not exceed $100 to $200 million, only a part of which would be for electronics. So you can see, this would not be a major factor.

Components

It is generally felt that the component category will stay the same in 1960 as in 1959. In this category are such items as tubes, semiconductors and parts for the replacement market.

In terms of sales, the industry showed a 21% increase last year over 1958. In 1960, it will probably increase 9% — going from $10.1 billion to $11 billion. Significantly, this will probably be better than twice the average of industry as a whole in 1960.

Consumer products will go from $2.2 billion to $2.3 billion, industrial products from $1.7 billion to $2 billion, military products from $5 to $5.5 billion, and the component section will hold its own at $1.2 billion. In all these figures, only factory sales are considered; they do not include advertising, or radio and TV programs growing out of products developed by the electronics industry. In summary, the broad outlook for 1960 in the electronics industry is one of optimism, with industrial products providing very promising growth opportunities.

*From a talk by Mr. Wishart before a meeting sponsored by First National Bank of St. Paul, St. Paul, Minn.

C.W.S. Waveguide Comm. Stk. Off'd

R. F. Dowd & Company, Inc., of New York City, on April 15 commenced the public offering of 300,000 shares of common stock (par one cent) of C. W. S. Waveguide Corp. at a price of $1 per share.

Of the net proceeds, $70,000 will be used for purchase and maintenance of adequate stocks of raw material such as aluminum waveguide tubing. copper bar stock, copper waveguide tubing, oxygen free copper waveguide tubing, aluminum flanges, bronze flanges, miscellaneous rods, sheeting hardware and chemicals; $30,000 for the purchase of additional manufacturing equipment; two bending machines, one small hand milling machine, three Bridgeport Vertical Millers, three general purpose lathes and some new and replacement attachments for existing machinery; microwave test equipment, and additional electrical testing equipment; $75,000 for reduction of outstanding indebtedness; and the balance of approximately $55,000 will be applied directly to working capital.

The company was incorporated under Delaware law on Jan. 12, 1960. Its principal office is located at 301 West Hoffman Ave., Lindenhurst, Long Island, N. Y.

The corporation was organized to take over and continue the business formerly conducted at the same address by C. W. S. Waveguide Corp., a New York corporation. The predecessor company was organized on Oct. 17, 1958 and actively engaged in the manufacture of microwave components for the radar and communications industries from Feb., 1959 to Feb. 19, 1960 when the company acquired its business and assumed its liabilities.

Howard Sadler Opens

BIRMINGHAM, Ala.—Howard A. Sadler is engaging in a securities business from offices at 2815 South 18th St. He was formerly with T. U. Crompton & Co.

Bateman Eichler Adds

(Special to The Financial Chronicle)

LOS ANGELES, Calif.—Lelan M. Love is now with Bateman, Eichler & Co., 453 South Spring St., members of the Pacific Coast Stock Exchange. He was previously with Revel Miller & Co.

Now With Du Pont

(Special to The Financial Chronicle)

LOS ANGELES, Calif.—John W. Hann is now with Francis I. du Pont & Co., Statler Center. In the past he was with Davies & Jemia in San Francisco.

Being an Optimist From Every Point of View

By Roger W. Babson

Reflection on what 80 years have taught him enables Mr. Babson to take the appalling items featured in the news and show they are not as bad as they are made out to be. Business, for example, is said to be in need of more optimism.

I am a statistician—not a politician. Most statisticians promise the impartial truth; while most politicians appear to promise what will get them the most votes. As a result of the latter, the following facts are entirely forgotten. People allow themselves to get scared and vote foolish sums of money, thinking that they will thereby have security, freedom from accident and employment.

Note These Figures

Although the daily newspapers feature crime, yet only one in 10,000,000 will tomorrow suffer or witness any crime. When a man is killed by lightning it is reported all over the country, yet only one man out of every 5,000,000 will be killed by lightning in the next very bad storm. Business failures are increasing; but they are decreasing on a percentage basis. The stock market has to go down before it can turn up. If trees grew any higher they would blow down. Everything which happens is for the best.

During the past 10 years the population of the U. S. has increased 18%; the gross national product has increased almost 70%; consumer income, even after taxes, has increased 60%. No figures on crime, accidents, or juvenile delinquency can equal these increases.

Cost of Living Downward

The politicians and labor leaders present figures to show that the "cost of living" is constantly going up. They forget that new products, greater conveniences, and other items have been added to the list which makes up the index. If it covered just the things I had when I was a boy in Gloucester—and my father was a well-to-do merchant—the U. S. "cost of living" index would be only one-half the figure now published.

From every point of view I am an optimist. Even the accidents and deaths by automobiles are much less than those from the "horse and buggy," when figured on a mile basis. The cost of light, heat, and power has continually decreased. Even food has dropped in price — for the same menu which we had in my boyhood days—and we were then as healthy and strong as are the young people today. We made our own candy, picked our own apples, and made our own cider; soft drinks were not then for sale.

Unemployment Is Optimistic

When unemployment statistics increase they are featured as dangerous and the stock market goes down! Yet the social workers tell us that the chief cause of juvenile delinquency is the fact that mothers are engaged in industry and away from home all day. When I was a boy, no mothers worked in factories. We kids were trained to help about the house and to help take care of the large families which most of our mothers had. I grew up as a "baby sitter," but never received or expected any pay therefor!

In those days the newspapers carried only news, with no entertainment features. We used to subscribe to the "Youth's Companion," or the "St. Nicholas Magazine"; while our mothers had fashion magazines and cut patterns from tissue paper for the clothes which they made. Now all these and many other features come freely from the excellent newspapers. All that glitters is not gold, but much is gold that does not glitter.

More optimism is needed in business. Things run on about the same from generation to generation. Human nature is not changed. We continue to spend one-third of our life in sleep; and the less we eat, the better we feel; the more we exercise, the longer we live. The world is very slowly but surely getting better. We all should be optimists.

Clayton Offers BTU Eng. Comm.

Public offering of 100,000 shares of the common stock of BTU Engineering Corp. at $3 per share was made April 19 by Clayton Securities Corp.

Net proceeds will be used in part for the purchase of a parcel of land and the construction of a research and development building near its present plant at Route 128 in Waltham, Mass. The total cost of this land and building is estimated at $170,000, and the company intends to borrow $115,000 of this sum. The remainder of the proceeds from the offering will be added to working capital.

BTU is engaged principally in the manufacture and sale of high temperature basic electric furnaces for use by the semiconductor industry in the production of transistors, diodes and similar products. The company also manufactures and sells a number of devices which are used to control temperature, pressure and various explosive gases used in the heat treating of semiconductors, metals and ceramics.

BTU was incorporated in Delaware in April of this year, as a successor to a business established in 1950.

Upon conclusion of the current financing, capitalization will consist of a mortgage note (estimated at $115,000) covering the proposed research and development building, and 600,000 shares of common stock.

For the eight months ended Jan. 31, 1960, the predecessor company reported net income of $72,518 equal to 12 cents per common share. As of April 1, 1960, backlog of orders on hand amounted to about $250,000.

Realty Equities Stock All Sold

A public offering of 150,000 shares of Realty Equities Corp. of New York common stock was made on April 20 by a syndicate headed by Sutro Bros. & Co. and including Ross, Lyon & Co., Inc., and Finkle, Seskis & Wohlstetter. The stock was offered at $5.25 per share.

The business of the corporation consists principally of the purchase and sale, management and developing of real estate in New York City, Westchester County, Nassau County and New Jersey.

The underwriters announced that the issue has been oversubscribed and the books have been closed.

Atlas Securities Branch

TORRINGTON, Wyo. — Atlas Securities Company has opened a branch office at 1827 Main Street under the direction of Blake B. Cassidy.

FROM WASHINGTON ...Ahead of the News

BY CARLISLE BARGERON

Vice-President Nixon is in an awful fix and his advisers are seriously concerned about it. He ran a poor third in Wisconsin. He was second best in Illinois. From the primary indications in those states he would lose both of them in November.

It is true that in Wisconsin Republican Catholics crossed over into the Democratic primary and supported Kennedy. But is there any reason to believe they will cross back in November?

The Vice-President's next challenge will be in Indiana on May 10. In this primary it will be him and Kennedy, running shoulder to shoulder. The chances are that Kennedy will either beat Nixon or will come so close in this traditionally Republican state that it will make Nixon look bad.

Kennedy has made one or two trips to the state to campaign. Nixon has been urged to visit the state by his advisers and by Senator Capehart. Capehart has said all along that he doubted Nixon could pull enough of the independent votes or the Democrats to his banner to win. He has supported Rockefeller.

Nevertheless, Capehart offered to accompany Nixon if he would go into the state and put on a three-day intensive campaign. Nixon still has the offer under advisement but it is doubtful if he will accept.

In the meantime, an agitation that Nixon can't win has started among Republican supporters. Four Republicans in New York signed a letter which they are giving widespread circulation.

It might as well have been written by Democrats. It brings up all the old charges that Nixon hit below the belt when he won the Senate seat over Helen Gahagen Douglas and when he previously defeated Jerry Voorhees for the House.

It is my humble opinion that these two campaigns were fully justified and it is my hope that Nixon will not draw any punches in the subsequent campaign.

But his present inactivity is proving disheartening to his supporters. A Republican newspaper in Denver has come out with a strong editorial saying he can't win in November and suggesting that the voters turn to Rockefeller. Rockefeller undoubtedly thinks there is the possibility of this happening. It is for that reason that he has refused to endorse Nixon, even though the President has, and the reason also that he is keeping his organization intact.

All things considered, a lot of doubt is being cast on Nixon's ability to win.

The explanation for his not launching his campaign now is that he expects to abandon some of Mr. Eisenhower's policies. Nixon is believed to favor medical assistance to the aged and he is supposed to be coming up with a new farm program.

While still Vice-President under Mr. Eisenhower, it would look bad for him to go any further than the President on policies. As soon as he is nominated at Chicago in late July, he will then be the Republican nominee and will feel free to set forth his own policies. As he puts it, he intends to build upon the Eisenhower program. If he adopts a new farm policy, evolves a medical assistance plan for the aged and also, as expected, supports Federal aid to education, he will not only be building upon Mr. Eisenhower's policies, but will also be departing from them radically.

But Mr. Eisenhower has said he expects Mr. Nixon to formulate his own program, that he wouldn't expect him to do otherwise.

The fact that Nixon is expected to have a new program, however, has a lot of Republican conservatives concerned. This group holds that the Republicans should have learned their lesson by now—that they can't win by saying "me, too." Senator Goldwater of Ariz., who is about as conservative as they come, is forging to the front. While there is no hope that he will get the nomination, he is getting a strong play for second place on the ticket.

Thermal-Aire Stock Offered

Pearson, Murphy & Co., Inc. and H. G. Kuch and Company (Phila.) offered on April 20 an issue of 200,000 shares of Thermal-Aire of America, Inc. common stock at a price of $1.50 per share. The offering marks the first public sale of the company's common stock.

Net proceeds from the sale of the common shares will be used by the company for various corporate purposes, including engineering, design and patent expenses; advertising and sales expenses and working capital for inventory, equipment, overhead and expansion.

Thermal-Aire of America, Inc. was incorporated under Delaware law on Sept. 2, 1959, under the name Thermal-Dynamics of America, Inc. Its name was changed on Feb. 8, 1960. With its principal offices in Newark, N. J., and plant facilities in Roxbury, Mass., the company is engaged in the manufacture and distribution of infra-red heating equipment; engineered heating services for industrial, institutional and domestic uses, employing infra-red ray heating units; and in the research, design, development engineering and manufacturing of silica quartz heating devices which transmit heat by the emission of infra-red rays. The corporation's products are distributed by 25 factory-authorized distributors and dealers principally east of the Mississippi and from Maine to Florida.

Upon completion of the current financing, outstanding capitalization of the company will consist of 388,333 shares of common stock.

Peter Morgan Offers Carolina Pacific Common

An offering of 100,000 shares of Carolina Pacific Plywood Inc. capital stock at $4.75 was made on April 19 by Peter Morgan & Company.

The corporation and its subsidiaries are engaged in the manufacture of rough sheathing and sanded plywood and lumber stubs. Its plants are located in Oregon and California.

The purpose of the issue is to increase the corporation's working capital position and to aid financing log inventories at peak periods.

Two With Giessing

(Special to THE FINANCIAL CHRONICLE)

FARMINGTON, Mo.—William H. Turner and Ray B. Wilson have become affiliated with M. P. Giessing & Co., 108 North Jefferson Street.

Taking a Critical Look At Railroad Management

By A. J. Greenough,* *President, The Pennsylvania Railroad Co. Philadelphia, Pa.*

A leading rail head delivers a blunt criticism of rail managements' failure to correct fundamental problems transcending auto, bus, air and St. Lawrence Seaway competition. Advocating less mileage and more mergers, Mr. Greenough asserts coordination is no answer to mergers. He endorses not only "side by side" mergers but also "end to end" ones, castigates what he describes as a growing trend toward sectional self-interest by the industry. How clean are our hands, he asks, if union featherbedding is singled out and managements' wasteful practices are ignored? Aware that mergers require hard work and cause hardship, Mr. Greenough calls for realistic and honorable treatment of all personnel affected. He is confident that underwriters, too, will support this solution.

We must all face one simple but basic fact: That is, that few railroads today are earning the money they should be earning, and buying the improvements and equipment they should be buying. Here in the East almost all of us are in difficulties in these respects. Big or small, we are nearly all in the same boat — and as things are going, that boat is becoming less and less seaworthy every year.

A. J. Greenough

I want to discuss briefly about the pervasive poverty of railroads, and one of the obvious but most important steps that must sooner or later be taken to correct it.

First, not to ignore our other problems, the ones we talk about so much in public, and let's label them "EXTERNAL" — the inequities of Government treatment, that favor our competitors, place unjust burdens on us, and deny us the full right to live like any other American business. In this area management is already doing about all that can be done—surviving under these inequities the best wey it can, while educating the Government and the public as fast as it can as to their intelligent self-interest in correcting them. But success in that area—and if we keep at it we should ultimately have considerable success—can take us only part way back to prosperity.

The rest of the job is to correct our "INTERNAL" problems, and there are enough of them to challenge the talents and courage of all of us in the railroad management family. One of them, however, is so outstanding that it rises above all others. I refer to the crying need for more mergers. *Our industry must face up to the simple fact that there are just too many railroads in the country today for their own good and for the public's good, and that mergers and the consequent elimination of duplicate facilities and wasteful competition within the industry are the only solution.*

The fact is not new — and in some ways it is not pleasant—but there it is, and I think more and more of us are going to agree that we have to face it. I, for one, earnestly believe that if the railroads of this country are to continue to function as healthy private enterprises, there must be —in the not too distant future— substantial reductions in the total mileage operated. I think it is important to recognize and remember that nearly every large railroad of today is the result of dozens of mergers in the past. Consolidations made most of our roads what they are—and having done so, it seems to me that two important lessons should now be apparent:

One is that consolidations have always been creative in purpose, the idea being to obtain more business by doing a better job—at lower cost.

The other, and this is mighty important, is that this creative trend was halted some 40 years— not for sound business reasons, but by anti-monopoly and anti-railroad sentiment of the "trust busting" era. So, for the past 40 years, except for occasional breakthroughs here and there, the industry has been avoiding and ignoring a natural process of evolution by which it could grow in usefulness and efficiency—and in doing so, we as an industry have been paying a cumulative penalty for this lethargy.

Savings in Consolidations

John Barriger, in his book, "Super Railroads," has estimated that 67,000 miles of railroad—or about 30% of the total route mileage of the country—carries only 2% of the ton miles, and by interpolating some of his other statistics, it appears that on the average these lines carry only about 550 tons of revenue traffic per mile per day. It has been estimated by some that the consolidation of railroads into a fewer number of large systems, which, of course, takes into account elimination of unprofitable branch lines, might save as much as one billion dollars a year. Even if such estimates are missed by 50%, we are still talking about a lot of money.

Railroad transportation is no longer a monopoly and there is no reason why the many systems and multiplicity of branches, built up geographically over the past, should be retained. The resultant inefficiency could be overcome by proper consolidations into a minimum number of systems of a manageable size. The nation would benefit, not only from the monetary savings achieved by elimination of wasteful competition and duplication of services and facilities, but also from improved and expedited services. Increased traffic density would permit more frequent and flexible schedules. Strengthened credit would permit financing of desirable new construction and improved equipment and facilities. The increased volume and pooling of cars would improve car supply and distribution. There would also be important benefits from economy of administration and supervision, with fewer intra-company transactions, statistical reports, tax returns, etc.

Are Our Hands Entirely Clean?

While, in my opinion, railroad management is making an excellent case with the American public on the subject of eliminating wasteful featherbedding practices, I sometimes wonder if our hands are entirely clean when we neglect to remedy some of our own wasteful practices — as exemplified by our reluctance to date to eliminate unnecessary tracks and facilities, through consolidations.

The plain fact that much of today's railroad plant is surplus and therefore uneconomic is no news to many of us, nor should we need statistics to convince us how widespread that situation is. All of us —railroad employees and suppliers alike—have been seeing it with our own eyes for many years. In the course of our travels we see miles and miles of parallel and competing main lines that are making a bare living on traffic that one of them could handle profitably. We see mazes of competing branch lines wandering about over feeder territory where there is subsistence for only one. And we can all name cities and areas where two or more yards— sometimes as many as half a dozen, are performing service that one modern yard could easily handle at a fraction of the cost.

Notes Situation Is Not New

We agree that this situation is not new; nor was it created by the subsidized competition we feel so acutely, and which has done so much to cut us back to 4% of the nation's passenger business and 46% of its freight. Surplus of railroad plant was a costly problem long before today's vast airway and highway systems were skimming the cream off our passenger and freight traffic, and when plans for that "socialistic ditch," now known as the St. Lawrence Seaway, were only a dream. Nor did such modern railroad techniques as the diesel, CTC, or automated yards create the situation, for it is older than they are. However, all these things have exaggerated and emphasized our failure to correct it.

However, we've been defending it—implicitly at least—by our inaction, with dangerous repercussions on the welfare of our customers, our suppliers, our stockholders, and the long-range security of personnel and officers.

While my remarks have been directed primarily toward the benefits to be derived from so-called "side by side" mergers, at the same time the many advantages of intersectional "end to end" mergers should not be overlooked. Aside from economies to be obtained through consolidation of certain management functions, such mergers would undoubtedly serve to alleviate the present conspicuous disagreement and growing trend toward sectional self-interest in our industry, which is now resulting in a divided house in so many important issues. In either case, however, coordinations between separate companies, although they are often suggested as substitutes for mergers, are not the answer. The fact is that coordination is generally impractical and usually produces relatively minor benefits. Back in the 1930's some 702 coordination studies were made throughout the industry, and they indicated a total annual savings of some $30 million. Twenty-nine of these 702 projects were actually found to be feasible, and ultimately produced total annual savings of $335,000.

I realize that I am only adding one more voice to a course of progress which has been advocated by many before me. But we are not going to get very far until there is pretty much agreement in the industry that the time is ripe, and the need is urgent. So, on the basis of what I know a lot of us have felt, I venture to speak my brief piece, and here it is.

First, I think that as railroad managers we must return to the spirit of creative enterprise that put the railroad industry together and with it helped build our country. We must stop thinking about preserving the past — or even the present. We must again make our industry a driving force in our economy. That's what it was when the old-timers ran it— and we can make it that way again. But we can't do it by worrying about what door our name is on, or where we personally appear on the organization charts. Our big need—in my opinion, our salvation—lies in fewer but more vibrant and dynamic railroads, with doors that are **worth** having our names on—and I think that is what consolidations would give us.

It should be recognized, however, that they are not a cheap medicine, nor one easily swallowed. They would take hard and perceptive thinking and planning, and business-like bargaining. They would require realistic and honorable treatment of such employees and management personnel who might temporarily be affected adversely—plus ability to **attract** new employees and new management personnel as growth set in. They would require money to reshape facilities—for the process would primarily be one of creation rather than abandonment, and creation always takes money. But once the investment world saw we meant business and meant to make business, and therefore make money, I don't think that would be a problem.

But all these very real demands and difficulties, I believe, would be nothing compared to the resulting benefits to the industry, to the shareholders, to the employees, customers and suppliers —and to the national economy.

One final word. The Pennsylvania has no present plans of a specific nature — however, our door does stand open: and I think that as the many important benefits of successful mergers become more apparent, a great many more doors will be open — because, collectively, they are, in my opinion, the doors to a real and growing future for our industry.

*An address by Mr. Greenough before the New York Railroad Club, New York City.

Sunair Elect., Inc. Stock Offered

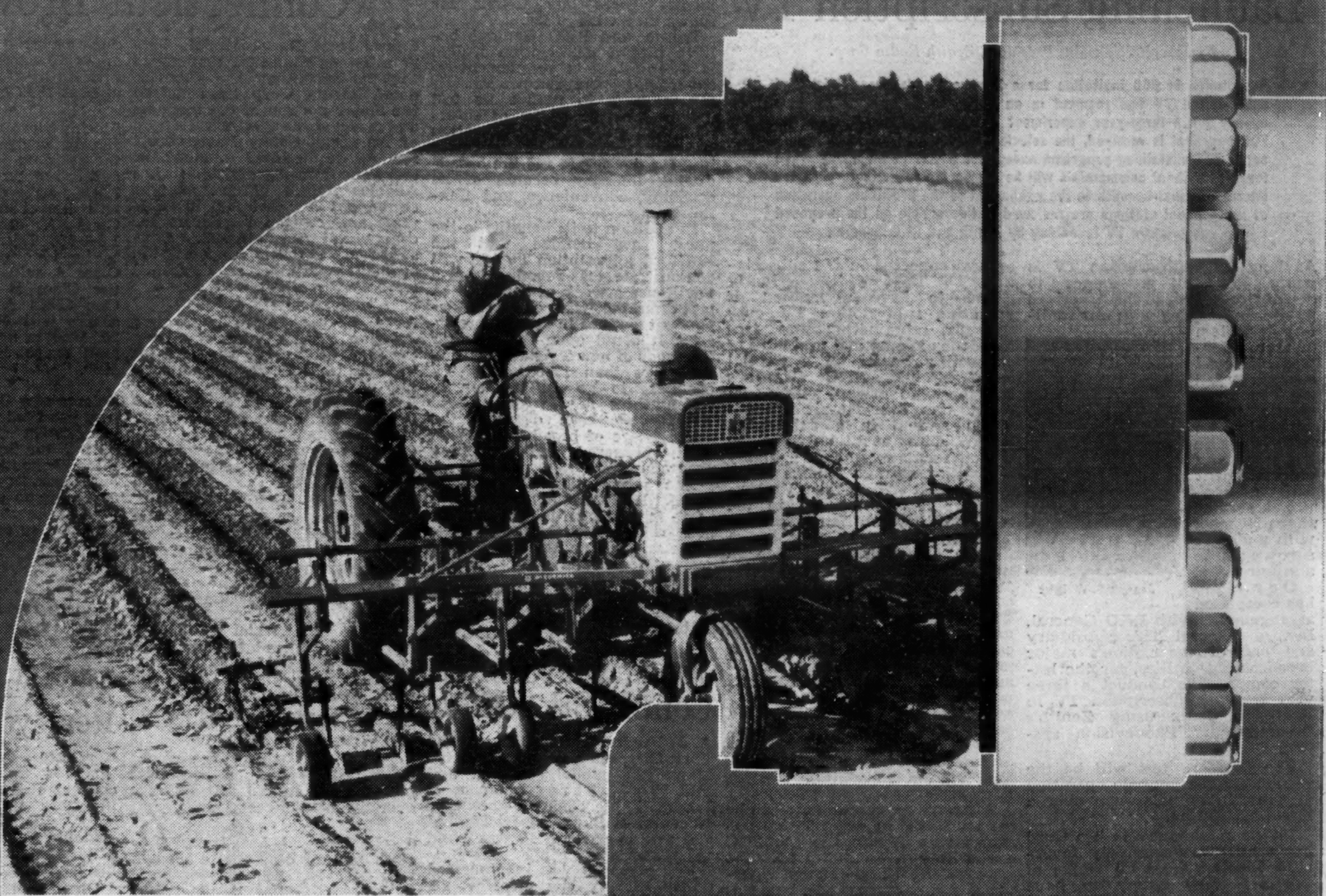
Frank Karasik & Co., Inc. and Associates on April 18 publicly offered 200,000 shares of Sunair Electronics, Inc. common stock (par 10 cents) at $3 per share.

Sunair Electronics, Inc., incorporated as a Florida corporation on Sept. 20, 1956, manufactures toroid transformers and transistor power supply units for other manufacturing companies in the missile, communications and portable measuring equipment fields.

The net proceeds of this financing to be received by the company will be applied as follows: The sum of approximately $85,000 to purchase additional electronic and aircraft service equipment, approximately $65,000 to increase inventories of Sunair and Florida Aircraft Distributors, Inc. (a wholly-owned subsidiary), approximately $75,000 to construct additional aircraft storage hangars, approximately $25,000 to increase ramp space, approximately $40,000 to construct a new shop for the electronics operation which is now housed in three separate buildings, and approximately $210,000 to increase working capital.

Form Zook Investments

WASHINGTON, D. C.—Zook Investments has been formed with offices at 1319 F Street, Northwest to continue the securities business of Maurice M. Zook. Partners are Mr. Zook and Memas Kolaitis, who has been associated with Mr. Zook as sales director for some time.



Launching Subscription TV

By Joseph S. Wright, President, Zenith Radio Corp.

Acceptance of FCC invitation for a large scale commercial trial of subscription TV has resulted in an application to that regulatory agency for a three-year experiment in Hartford, Conn. As soon as FCC approval is received, the selected channel will broadcast sponsored and sustaining programs except for a few hours a day when features without commercials will be shown for subscribers on a fee basis. Potential benefits to the public and to the profitable operation of independent stations are reviewed in this article on the proposed subscription TV launching by Zenith and RKO General.

At long last, subscription TV is going to have a chance to demonstrate itself to the American public. In keeping with our traditional system of free enterprise, it will succeed or fail on its own merits, on its ability to provide the kind of entertainment and educational service that will meet with public acceptance and patronage.

Joseph S. Wright

Our firm has completed arrangements with RKO General, Inc., a General Tire subsidiary and one of the nation's major broadcasting entities, for the latter company to conduct a three year trial of subscription TV in Hartford, Conn. using Zenith's "over-the-air" Phonevision system.

The Hartford test will be the world's first large scale operation of subscription television over a broadcast station.

Public acceptance in Hartford has been overwhelmingly favorable. Leaders from all walks of life are very happy to have Hartford chosen for the first operation and are outspoken in their belief that it will benefit the entire Hartford area.

Within the next few weeks, RKO General will apply to the Federal Communications Commission for authorization to conduct the test in Hartford in full conformity with the conditions laid down by the Commission in its last order on the subject.

It is contemplated that the test will be conducted over UHF station WHCT on Channel 18, which RKO General is acquiring from Capitol Broadcasting, Inc., subject to FCC approval.

The Hartford station was purposely chosen in an effort to prove that stations not affiliated with networks can operate profitably if they are permitted to engage in subscription broadcasting as a supplement to advertising support.

Reviews Years of Experience and Research

After many years of intensive research and development in subscription television by Zenith, we have now come to the point where for the first time in history thousands of American television set owners can look forward to enjoying for a modest fee the finest box office entertainment in addition to "free" programs currently sponsored by advertisers.

We began research on a subscription TV system in 1931 and have led the way in seeking government approval for a large scale subscription TV trial. The company made the first demonstration of its Phonevision system in July, 1947. In 1951, the company conducted a 90-day public test in Chicago with 300 families selected from the more than 60,000 who wanted to try pay-TV in their homes. The success of the Chicago test accelerated our subscription development program, justifying the investment of many millions of dollars more for research and promotion.

Zenith is the only one of several concerns in the subscription TV field which seriously claims to have a method of operating subscription TV over the air, eliminating the tremendous expense and problems of connecting homes on a coaxial cable method. RKO General's decision to go forward with a trial using the over-the-air Phonevision system in a substantial market comes at a time when the climate for its acceptance is highly favorable. Market studies show that at least 50% of the TV viewing public is interested in the service and would like to become subscribers.

RKO General's experience in the broadcasting and entertainment fields make it an ideal company to conduct a subscription TV operation. It is one of the most important entities in broadcasting, second only to the major networks in the number of TV and radio stations operated and populations served. The company owns and operates VHF TV stations in Boston, Los Angeles, New York, and Memphis, and has an interest in a Windsor, Ontario, VHF station. In addition it owns and operates six radio stations.

Although no precise date can be set for initiating subscription operations in Hartford, since FCC authorization is required, the application will be pursued vigorously and operation will begin as soon as possible after authorization is received.

Our engineers have completed extensive field tests on a new Phonevision decoder for use in the home which permits easy operation and simple attachment to the subscriber's receiver. It is highly efficient and practical to manufacture and maintain.

Tooling for production will begin by the time the test authorization is granted and delivery of units should be made in a matter of month's thereafter.

The limited Chicago subscription TV test showed that until TV viewers experience subscription TV in their own homes they cannot really know whether they want the service. After many years of study, surrounded by controversy inspired by the TV networks and movie theatre owners, the FCC held to this position and ruled that a large scale commercial trial was necessary to determine the value of a subscription service. In its Third Report on the subject the Commission invited applications for such a trial and set up limiting ground rules. The Hartford test will be developed within this framework.

Subscription broadcasts over WHCT will follow the general outlines we suggested in comments filed with the Federal Communications Commission over the past few years.

Explains Programming

During most of the broadcast day, WHCT will broadcast sponsored and sustaining programs. For a few hours each day, it will offer box office features—without commercials—that are not available on regular sponsored TV. During these hours, subscribers can buy for a moderate fee first run motion pictures, symphony concerts, and other fine box office entertainment.

The fee for each feature will be substantially below the cost of going outside the home to see it. Subscribers will be charged for those features viewed, just as theatre goers buy tickets for shows they wish to see.

Zenith and RKO General believe that a subscription system is essential as a supplement to advertising sponsored programs if television is to realize its full potential as a medium of entertainment, culture, and education and that a **broadcast** system is best for the public and the broadcasting industry because of its economy, convenience, and flexibility.

In addition to its benefits to the public, we believe that the Hartford subscription TV test will demonstrate that revenue from a few hours a week of subscription programming will enable independent stations to operate profitably. It could open the way for hundreds of new TV stations using the more than 1300 vacant TV channels to go on the air in communities now without local TV service, each devoting the major share of broadcast time to local sponsored and sustaining programs.

The subscription TV trial in Hartford will rapidly prove that there is a substantial demand for box office entertainment in the home and will so demonstrate the system's economic soundness that broadcast subscription TV will grow into a major nationwide service before the end of the sixties.

Jones & Frederick Comm. Stk. Off'd

A. J. Frederick Co., Inc., of New York City, via a prospectus dated March 29 publicly offered and sold 99,000 shares of Jones & Frederick, Inc. common stock (par 10 cents) at $3 per share. The bid and ask as of April 19 was 4 bid 4½ asked.

The company was incorporated under Florida law on Nov. 19, 1959. It maintains its principal office at 401 Miracle Mile, Coral Gables, Fla. Since Jan. 28, 1960, the company has owned all the issued and outstanding capital stock of Southeastern Builders, Inc., a Florida corporation, which was incorporated on May 28, 1948. The company and Southeastern have been and are now engaged in the real estate development business, chiefly in Florida.

Proceeds from the sale of the common stock will be used in connection with the acquisition of additional properties and for development of present real estate.

The capitalization of the company giving effect to present financing, will consist of 329,000 shares of 10 cents par common stock outstanding.

L. H. Sullivan Offers Don Mott

Leon H. Sullivan, Inc., of Philadelphia, Pa., on April 18 publicly offered 161,750 shares of Don Mott Associates, Inc. common stock—class B (non-voting) (par $5) at $10 per share. The concession to all members of the National Association of Security Dealers on the issue is 75c per share.

The company was organized for the purpose of buying, selling, developing and managing real estate in Central Florida.

The proceeds are to be used in the purchase and improvement of business properties, buildings and undeveloped land for the construction of private homes.

Form Securities Sales

(Special to The Financial Chronicle)

MIAMI, Fla. — Securities Sales Company is conducting a securities business from offices in the Ingraham Building. Officers are P. Watkins, President; G. M. McCulloch, Vice-President; and B. Woodward, Secretary and Treasurer.

Connecticut Brevities

Consolidated Diesel Electric Corporation of Stamford announced that its subsidiary the Consolidated Controls Corp., has acquired the major portion of the business and assets of the Com-Air division of American Safety Razor Corp. for an undisclosed amount of cash. The Com-Air division in Los Angeles makes ground support equipment for missile installations and oxygen regulators for commercial jet aircraft. Consolidated Controls expects the acquisition will increase its annual sales by $1,100,000.

* * *

Avco Corporation's Lycoming Division of Bridgeport has been awarded production contracts for T53 gas turbine engines amounting to $14,234,460 by the Air Force's Aero-Nautical Systems Center, Air Material Command, Wright-Patterson Air Force Base, Ohio. The contracts extend current production of the T53 through December, 1961.

* * *

Bigelow-Sanford Carpet Company has acquired an option to purchase a majority interest in Crestliner, Inc., one of the nation's five largest manufacturers of outboard motorboats. The transaction is subject to approval of the Bigelow directors at a special meeting in April or during the regular board meeting May 3. Under the terms of the option the full purchase price would be $2¼ million of which $600,000 would be paid in cash at the closing date on or before May 16, 1960. The remaining $1,650,000 would be covered by a Bigelow unsecured note payable in annual installments over the next three years.

* * *

Stockholders of **Armstrong Rubber Company** of West Haven will vote May 16, 1960 on a proposal to convert the Class A non-voting and Class B voting stock into a single class of voting common. Stockholders will also be asked to vote on a proposal whereby the company would exchange 150,000 new common shares for Sears Roebuck's 50% interest in Armstrong Tire and Rubber Company, thereby giving Armstrong 100% control of the affiliate. Also on the agenda is a proposal to finance a new tire factory on the West Coast by a $25 million, 20-year loan tentatively agreed upon with a group of institutional investors. The company has announced that it plans to file a listing application with the New York Stock Exchange.

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Stockholders of **Allied Control Company,** of Plantsville, have approved an increase in the authorized common stock from 300,000 $1 par shares to 600,000 50¢ par shares to effect a 2-for-1 stock split. Directors have voted a quarterly dividend of 12½¢ a share on the new common, payable May 17 to holders of record May 6.

* * *

Associated Spring Corporation of Bristol has announced that a new plant of 60,000 square feet costing $1.1 million has been completed at Mattoon, Ill., for its Gibson Division. This facility replaces an old unit in Chicago, sold for book value of $275,000, non-recurring moving expenses of about $775,000 equal to 33 cents a share after taxes were charged against 1959 earnings.

* * *

Stockholders of **Harvey Hubbell, Inc.,** of Bridgeport recently voted to approve a change in the authorized common stock. The old 820,000 authorized common shares will be changed into 1,640,000 Class A common shares and 1,640,000 Class B common shares to be identical except that the Class A will have 20 votes and the Class B 1 vote per share. One Class A and two Class B shares will be distributed April 29, 1960 to holders of each common share of record April 11, 1960.

* * *

Teleregister Corporation of Stamford has filed a registration statement with the S.E.C. covering $6 million Subordinated Sinking Fund Debentures, due May 1980 (with warrants attached) and 240,000 common shares to be offered publicly in units of $1,000 Debenture and 40 common shares. Each $1,000 Debenture will carry five year warrants to purchase 20 common shares, initially at $15 per share. Proceeds from the financing will be used to repay bank loans and for operating expenses.

Morton to Offer Realty Interests

Real estate ownership interests, a type of syndication heretofore concentrated mainly among larger investors in Metropolitan New York, will soon be available nationally through the 68 branch offices of B. C. Morton & Co., it has been announced.

They will be offered in $500 units—through a joint venture of the Boston-based Morton organization and Interamerica Realty Corp. of New York. Up to now, the required investment in syndicate programs has amounted to five and 10 times that figure. It was stressed, however, that despite the small dollar units, only prime properties will be considered for possible partnership participation.

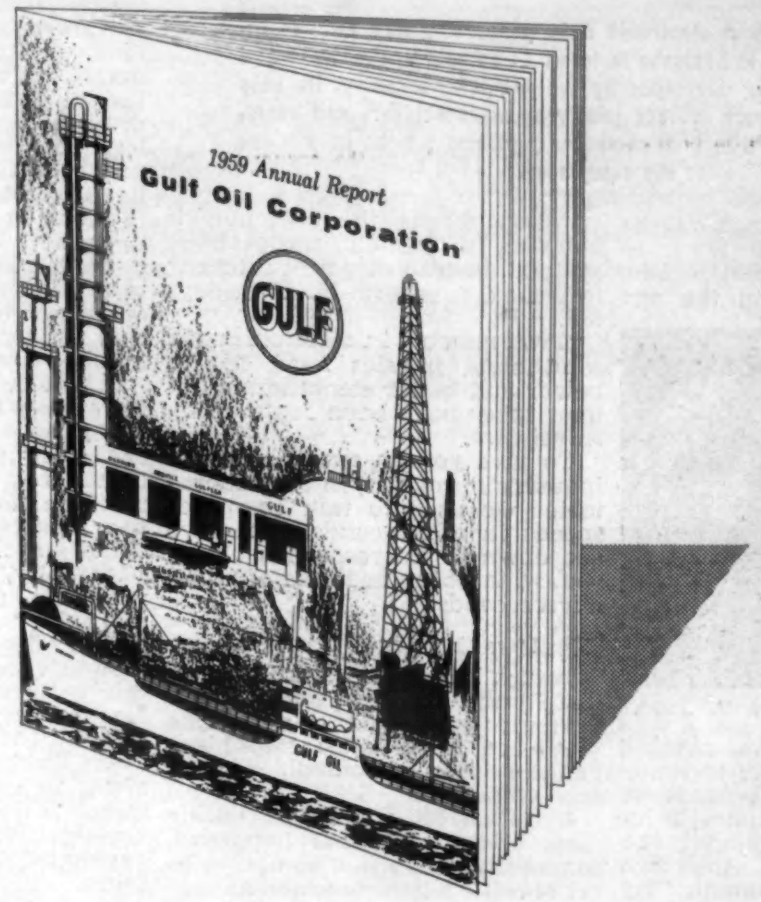
The venture marks B. C. Morton's initial entry into the field of real estate investing.

The principals in Interamerica Realty, which was organized for this joint operation, have been active for many years in the syndication of apartment developments, office buildings, hotels and motels in Florida, Texas, New York, California, Canada and the Northwest.

Morton - Interamerica's joint venture in such offerings will be directed sales-wise from the Morton organization's executive headquarters at 131 State Street in Boston. The realty phases will be managed from Interamerica's offices at 375 Park Avenue in New York City.

American Div. Branch

LOS ANGELES, Calif.—American Diversified Securities Inc. has opened a branch office at 7315 South Western Avenue.



1949-1959 A Decade of Record Progress at GULF OIL

Results of Gulf Oil's world-wide operations in 1959 reflected continued over-all progress. A comparison of the company's major financial and operational activities in 1959 and 1949 emphasizes Gulf's rapid growth over the past decade.

Net income in 1959 was $290,467,000—nearly triple the company's net income in 1949. Sales and other operating revenues totaled $3,170,847,000, compared to $1,123,885,000 in 1949. Based on current shares, cash dividends increased from 45¢ per share to 97¢ during the ten-year period. Daily average barrels of net crude oil and condensate produced rose from 405,727 barrels in 1949 to 1,304,183 in 1959.

Financial and operational highlights for 1949 and 1959 are presented here.

A copy of Gulf's report will be sent upon request to Public Relations Department, Gulf Oil Corporation, P. O. Box 1166, Pittsburgh 30, Pa.

CONSOLIDATED FINANCIAL DATA

	1959	1949
Net Income	$ 290,467,000	$ 100,877,000
Net Income Per Share (Adjusted for all stock dividends and stock splits)	$2.90	$1.07
Cash Dividends	$ 96,876,000	$ 42,545,000
Cash Dividends Per Share (Adjusted for all stock dividends and stock splits)	$.97	$.45
Stock Dividends	3%	—
Total Assets	$3,576,318,000	$1,215,891,000
Working Capital (Current assets less current liabilities)	$ 690,656,000	$ 205,848,000
Sales and Other Operating Revenues	$3,170,847,000	$1,123,885,000
Capital Expenditures	$ 335,771,000	$ 168,421,000
Depreciation, Depletion, etc.	$ 260,845,000	$ 80,488,000

OPERATIONS DATA–DAILY AVERAGE BARRELS (*)

	1959	1949
Net Crude Oil and Condensate Produced	1,304,183	405,727
Net Natural Gas Liquids Produced	40,731	6,825
Crude Oil Processed at Refineries	685,101	381,443
Refined Products Sold	828,110	399,681
Natural Gas Liquids Sold	124,638	7,097

(*) Operations data include Gulf's equity in all operations in which the Company has an interest.

Today's Data Processing And Outlook for the 1960's

By M. B. Smith, *Vice-President and Group Executive, International Business Machines Corp., New York City*

Mr. Smith explains how electronic data processing has become increasingly important in business in terms of current applications and future uses now being developed by the computer industry. He lists practical hints that were evolved jointly by manufacturers and users, and states tomorrow's biggest computer problems will be proper use of the equipment.

The American businessman put the electronic computer to work in many ways during the past decade. But he is just entering the age of computers.

McLain B. Smith

It was only at the close of World War II that the first entirely electronic computers appeared. These were mainly used by science. During the 1950's, data processing equipment was employed by industry to perform hundreds of different tasks, ranging from helping design jets to regulating oil refinery processes. Now, according to a recent estimate by *Fortune*, some 2,000 computers are solving problems for American business and government. By "computer" *Fortune* means computing equipment for $1,000 monthly charges and above.

To fully realize why the computer is becoming increasingly important in the business world, you need to know something about what it had done in the past, can now do, and what it may do in the future.

First, let's take a look at data processing's past:

It was in 1944 that the first modern machine to use the principle of *sequential control* was completed. Sequential control, means to specify in advance a sequence of arithmetic operations to be handled by the computer. In 1946, John P. Eckert, Jr. and Dr. John W. Mauchly completed a machine which was entirely electronic in internal operation. Based on the "stored program" idea of placing "instructions" in memory, which appeared in a 1945 report by Dr. John von Neumann, computers were built with *internal memory systems*. Later machines have been able to generate a considerable part of their own instructions.

However, technological progress had only begun.

As newer and newer business machines were built, problems of input and output were stressed. A method of storing digital information on *magnetic tapes* was developed. The tape technique gave a new input speed 50 to 75 times that of punched cards. It improved input, output, and data storage. In the 1950's, machine systems of increasing power and capacity were developed to reduce burdensome clerical chores.

Magnetic cores and *magnetic drums* began to replace earlier memory devices, and served as a more reliable method.

Another outstanding achievement in the last decade has been the development of economical, large volume, *random access memory*.

Before this technique was developed, information had to be filed and processed in "batches," or large groups of data, so that the computer could be kept constantly supplied with "batches" of problems. Today, with economical, large volume, random access memory, the computer can work on problems in real time. For example, the computer can accept information from the manufacturing shop, process it, and issue orders to the shop to control inventory. In other words, the computer is working *in line* with the problem at hand, instead of with "batched" information, several hours or days old.

Developments in electronics and solid state physics have led to newer and better computers. Vacuum tubes have been replaced by *transistors*.

To give you an example of the industry's progress, in our laboratories we used to talk computer speeds in milliseconds. Then we got down to microseconds. Now, we are thinking in terms of millimicroseconds.

Reviews Difficult Tasks Done

Today, large-scale and intermediate computers are doing many difficult tasks for all of us. These tasks can be grouped into three general areas: *Control, Design*, and *Simulation*.

By *Control*, we mean taking facts about what has happened, condensing them in a computer to get specific performance measurements and using this as a basis for corrective action.

Here is one example of off-line Control: In the offices of a chemical corporation, a computer figures thousands of monthly cost sheets which affect hundreds of organic chemicals. Before the computer was installed, the task took 15 working days. Now it takes five days, leaving ten open for other work. The effect of having this vital cost information ten days earlier than with previous methods gave the corporation the basis for corrective action that could be made effective in the current operating month.

The second area in which computers are useful today is *Design*. Computers can do many things fast. They make intelligent guesses and then calculate the characteristics of each guess and check it to specifications.

An automobile manufacturer uses its computer to help solve transmission and other design problems. Automotive engineers can now consider a wide range of possibilities and do a better job of coming up with the best possible transmission in terms of size, efficiency, and weight.

A third use of computers today is *Simulation*. Computers test the formulations of numerous operating plans, usually expressed in mathematical form and then select the most productive plan.

A leading aircraft manufacturer uses computers to simulate different flights for its jets. A computer determines payload, speed, fuel consumption, and requirements for runway length under varying weather conditions, without a plane ever leaving the ground.

These are just a few examples of the use of computers today. In the industry's laboratories, research engineers are developing devices for computers of the future.

Computers of the Future

For example, research projects in the computer industry will contribute to more effective *input-output* devices. *Character sensing* involving both optical and magnetic properties will permit electronic data processing to attack large volumes of documents not now economically accessible. More *compact magnetic heads* will permit higher density utilization of magnetic tapes. Research on magnetic tapes opens up a completely new vista of much greater densities with better standards of performance. Research is also involved in the chemistry of *photographic film* for its value as a source document and as a type of memory component. *Process control research* is directed toward automated production.

Computer research has actually spread into a number of other scientific fields. For example, work in *information theory* has led to important developments in error detection and correction codes. Future applications of highly theoretical investigations may well lead to new limits for reliability and achievement of performance. Research in *psychology* undertakes to learn how humans process information. Systems analysis seeks more efficient designs utilizing present components; the specifications of new components necessary for tomorrow's level of complexity; and the incorporation of suitable *information retrieval* techniques for management action questions. Research in *machine organization* seeks to uncover optimum relative speeds of various machine functions to determine the most effective internal machine structure.

Actually, the biggest computer problems of the future are generally in the area of application—or proper use of the equipment. Computer manufacturers will certainly help, but these are problems which will have to be solved in the offices of computer users.

On this subject, let me pass along to computer users—or potential computer users—some practical hints which were jointly developed by manufacturers and users.

Offers Practical Hints

First, the problem of training personnel to operate and prepare programs for computers. These machines are not so complex that only engineers, mathematicians and physicists can operate and plan work for them. Experience has shown that with sufficient training, present company staffs can use the most advanced systems.

Second, whether you are about to order a computer or already have one, remember that the manufacturer wants to see it operate successfully, as much as you do. Work closely with the manufacturer, because he is interested in you, and anxious to help solve your problems.

Third, when ordering a computer, consider all the costs, the hidden and preliminary, as well as the obvious running expenses.

Fourth, remember that no computer will be a cure for current system ills. If you are unable to correct your system, no computer will do it for you.

As a *fifth* suggestion, always consider all the total capabilities of the computer in relation to *your* system requirements.

Sixth, don't simply try to superimpose electronics on top of existing programs. All you get is redundant costs.

Seventh, when designing your computer system, try to keep in mind what you will want to be doing with your system three to five years from now.

Eighth, no matter what business you are in, don't leave it to individual departments alone to decide what should be done with a computer, or why, or how. A computer has to be of paramount interest to top management.

Last, the systems concept—or integrated data processing—which is perhaps the most important challenge facing users. Management will have to learn more about all the many uses of data processing machines so the equipment can be put to its best possible use. It is not enough to view a single machine as an entity. Don't be overwhelmed by tubes, diodes, transistors, and the like. People who do this run the risk of becoming "hardware happy." Management in the future will have to think in terms of systems, or groups of machines, that can best carry out the purposes of the organization.

Let me conclude this review of the computer's past, present and future, by saying that although American management made extensive use of electronic data processing systems in the 1950's, it will make even greater use of them in the next ten years. As we move into the 1960's—the second decade of data processing—no one can predict the limit of the future of the computer age.

Atoms' Use Is a Problem But Man Remains in Control

By David H. Cogan, *Chairman and President, The Victoreen Instrument Co., Cleveland, Ohio*

Mr. Cogan provides a complete guide as to what is being—and should be—done to live with the atom. This covers such disparate matters as atomic power generating devices, municipal water supply protection, and use of X-ray by medicine and dentistry. Monitoring equipment industry, now containing between 80 to 100 firms, is expected to expand as the use of the atom for power, medical research, diagnosis and treatment, and industrial research and processing grows. Industry, regardless of protective measures taken, is urged to notify authorities where they use or store radioactive materials.

Increased use of the atom for peaceful purposes is presenting new problems to a widening number of communities around the nation.

D. H. Cogan

Those working with atoms and those living in areas where atoms are at work face no perils, however, where proper safeguards are taken.

It is the increasing demand of governmental, medical, scientific and industrial leaders for proper safeguards and warning systems that has given real impetus to growth in the radiation monitoring business.

Conservatively, it is expected that monitoring equipment and other nuclear electronics sales, industry-wide, will reach toward the $100,000,000 mark this year, compared with an estimated $60,000,000 in 1959.

Dr. Shields Warren, pioneer and still leading authority on the effects of nuclear radiation, recently said that man must learn to live with the atom.

By this, he meant that man should go ahead with peaceful use of the atom, but take proper steps to protect himself. This is not a gigantic task. It requires only good common sense and the application of man's knowledge about radiation.

Man's use of the atom for peaceful purposes began with the discovery of the uses to which radium might be used. X-ray opened up new fields of medical diagnosis and later to treatment of malignancy. In the early days, there were no reliable means for measurement.

However, John A. Victoreen, founder of the company which I now have the honor to serve, developed in 1931 an instrument for measurement of the emanations of x-ray. From that has grown a host of instruments for measurements of all types of radiation.

Victoreen Instrument was alone in the field through the first Bikini bomb test. Since then others have entered the field and now there are between 80 and 100 firms making various types of monitoring devices.

Expects Industry to Expand

As the use of the atom for generating electric power, for medical research, diagnosis and treatment, and for industrial research and processing grows, the monitoring device manufacturing industry also will expand.

The immediate post-Hiroshima years saw the development of geiger counters and other devices for uranium prospecting. Other types of monitors were designed for measurement of the immediate and fall-out effects of atomic and hydrogen bomb blasts. In the past decade, more varied and more sensitive devices have been developed and there is no end to development in sight.

Where emphasis in the past was on instruments for use in event of a nuclear war, it now is more on devices to protect personnel operating reactors on submarine, ship, or in the power generating plants, and on other types to protect the life-sustaining air and water of the populaces of areas in which the power plants are located.

Equally important, however, has become the task of protecting medical, dental and research laboratory personnel and others from possible harm from the dangers of exposure to rays emitted by isotopes they are using to advance the good of man.

We have developed for nuclear submarines, and the nuclear cargo vessel "Savannah," systems which constantly monitor all areas of the ships. Should there be any accidental leakage of radiation, warnings are sounded automatically and the reactor can be shut down while corrective measures are taken.

Water supply protection is becoming increasingly popular among those responsible for the operation of such systems. When the University of Michigan's nuclear research laboratory was built several years ago, the city of Ann Arbor immediately obtained a device for keeping constant check on the water passing into its mains.

The City of Philadelphia recently installed two newer types so that its entire system is under 24-hour check.

Water has a normal level of radioactivity. Should there be even the slightest rise over this level, an alarm would alert engineers operating the system and action taken to protect residents of the community served.

The new awareness of public health authorities to the possible dangers inherent in the atom at work has had beneficial effects in the x-ray field, too.

Public Health Surveys

For instance, with construction of a nuclear power plant in progress in the area, the public health authorities of Westchester County, N. Y., undertook a radiation survey. This uncovered more than three score places where x-ray machines, because of improper shielding, old age or other reasons, were dispersing harmful rays which endangered personnel operating them.

This has led to similar checks in other parts of the country and warnings from the U. S. Public Health Service which advised extreme care be taken to protect persons from this danger.

X-ray, like other types of radioactivity, can destroy the human body as readily as an atomic bomb, whether it be in one, big overdose — an unlikely occurrence —or an accumulation of overex-

posure over a short or long period of time.

Proper monitoring devices are good insurance wherever radiation is used, be it in the dental office, or in the steel plant where the isotope is being used for research or quality-control.

In Victoreen, steps were taken years ago to keep the Cleveland, Ohio fire department advised at all times of the exact points in its plant were radioactive materials were in use or stored. Thus, in event of fire, members of the department will be able to avoid exposure to the dangers of radiation.

Where industrial and other users do not take steps to keep proper authorities informed, they are making a serious mistake.

Since laxness could mean harm to unknowing persons, communities gradually are taking steps themselves to insure that they are advised of the presence of radioactive materials. Thus, their police and firemen, should they ever have to enter upon the premises while laboratories or plants are closed down for the night or week-ends, would not blunder into a radioactive zone.

An important segment of the monitoring industries output is the personal dosimeter. This is a device for keeping a constant record of the amount of radiation to which the wearer has been exposed.

In vital plants, weekly readings are made to determine whether the wearer has been exposed between readings, or whether a series of exposures has brought the person upwards toward a dangerous level.

It all adds up to man's learning to live with the atom.

FICB Offers 9-Month Debs.

The Federal Intermediate Credit Banks offered on April 20 a new issue of approximately $184,500,000 of 4.55% nine-month debentures, dated May 2, 1960 and maturing Feb. 1, 1961. Priced at par, the debentures are being offered through John T. Knox, Fiscal Agent and a nationwide group of securities dealers.

It was also announced that $9 million of the Oct. 3, 1960 outstanding maturity and $15 million of the Nov. 1, 1960 outstanding maturity were reopened and sold at the market for delivery May 2, 1960.

Proceeds from the financing will be used to refund $151,900,000 of 4⅞% debentures maturing May 2, 1960.

Form Shaw, Bauer Co.

(Special to THE FINANCIAL CHRONICLE)

BROOMFIELD, Colo. — Shaw, Bauer & Company, Inc. has been formed with offices at 290 West Midway to engage in a securities business. Officers are John R. Shaw, President, and Walter R. Bauer, Vice-President and Secretary.

Tiedemann Assoc. Opens

Tiedemann Associates, Inc. is engaging in a securities business from offices at 116 John Street, New York City. Officers are Arthur L. Tiedemann, President; Frank Copsidas, Vice-President; and Charles B. Walter, Secretary.

G. H. Walker Adds

(Special to THE FINANCIAL CHRONICLE)

ST. LOUIS, Mo.—John F. Eades and Albert D. Hanser have been added to the staff of G. H. Walker & Co., 503 Locust Street, members of the New York and Midwest Stock Exchanges.

A. J. Frederick Branch

MIAMI, Fla.—A. J. Frederick Co., Inc. has opened a branch office at 8020 West Drive, Harbor Island, North Bay Village.

Delaware Fund Elects Directors

WILMINGTON, Del.—Shareholders of Delaware Fund at the annual meeting elected Eleuthere I. duPont, Treasurer of Continental American Life Insurance Company, a director.

Mr. duPont, formerly Assistant Treasurer of the Bank of Delaware, joined Continental American in 1954 and two years later was appointed to his present post.

Other directors elected at the meeting include: D. Moreau Barringer, Chairman; W. Linton Nelson, Alexander Biddle, George S. Piper, W. Howard Dilks, Jr., J. Ebert Butterworth, Theodore Roosevelt, III, and E. Dorsey Foster. All nine board members hold identical posts with Delaware Income Fund.

New Hirsch Office

Hirsch & Co. has opened a branch office at 655 Madison Avenue, New York City.

Form Securities Managem't

ST. PAUL, Minn. — Securities Management, Inc., is engaging in a securities business from offices at 1914 Hillcrest Avenue. Officers are Dr. A. M. Madsen, Jr., President; F. Keith Hunt, Vice-President; and Russell E. Larson, Secretary-Treasurer.

NEWS ABOUT BANKS AND BANKERS

Consolidations • New Branches • New Offices, etc. • Revised Capitalizations

The Board of Trustees of **The Dime Savings Bank of Brooklyn, N. Y.**, announced April 18 the election of Thomas S. Sites, Senior Vice-President, to Executive Vice-President.

Thomas S. Sites

Mr. Sites was employed by the bank as an office boy in 1931. After holding various posts at "The Dime" during the eight years, 1931-1939, he was made Manager of the Mortgage Application Department. Two years later, in 1941, he achieved officer rank when he was appointed Assistant Mortgage Officer. In 1945, he was made an Assistant Secretary in charge of Mortgage Servicing, was advanced to Assistant Vice-President in June, 1946, and was made a Vice-President in November, 1952. He was elected Senior Vice-President and Secretary in June, 1958.

* * *

The Chase Manhattan Bank, New York has promoted to Assistant Vice-President Howard A. Hassard in the metropolitan department and Stanley J. Lewand in the United States department, both former Assistant Treasurers.

Appointed Assistant Treasurers in the metropolitan department were: Robert H. Clarke; Clarence R. Corbett; Partick J. Cullen; Edwin J. Dehan; Sol Gross; Walter T. Johnson; Vincent P. Loria; Ture Lyzell; Roy H. Oehl; George H. Perry; Thomas M. Shanahan; Vincent Simonelli; and Frederick J. Solana.

Horace A. Worrall was appointed personal trust officer in the trust department.

* * *

Five members of the Metropolitan Division of **Chemical Bank New York Trust Company, New York**, have been elected Assistant Vice-Presidents, Chairman Harold H. Helm announced. They are: Walter E. Flinch, Peter Haaren, William H. Osborn and Williamson Thomas, former Assistant Secretaries, and Charles Pfadenhauer, former Manager.

* * *

FEDERATION BANK AND TRUST CO. NEW YORK

	Mar. 31,'60	Dec. 31,'59
	$	$
Total resources	151,574,771	172,278,697
Deposits	131,719,975	152,442,898
Cash and due from banks	11,608,676	32,926,292
U. S. Govt. security holdings	18,821,694	18,828,403
Loans & discounts	90,032,586	89,926,950
Undivided profits	1,415,021	1,288,677

* * *

The election of Eugene R. Chrisler as an Assistant Vice-President of **The Marine Midland Trust Company of New York** has been announced by George C. Textor, President. Mr. Chrisler will be associated with the Investment Management division of the Trust Department.

For a time he was associated with the **Hanover Bank, New York.**

* * *

The promotion of Edouard Eller to Executive Vice-President has been announced by the **Belgian-American Banking Corporation, New York.** Paul Sandrisser, also has been promoted to Senior Vice-President. He is also Treasurer of the bank and is in charge of its securities and investments departments.

* * *

Robert M. Catherine, Chairman of the **Dollar Savings Bank of the City of New York**, announced the election of George T. Kinderman as Vice-President in charge of public relations.

* * *

Two new officers were named by the Board of Directors of the **County Trust Company, White Plains, N. Y.** John A. Kley, President, announced. Promoted were Cas J. DiYeso, Regional Services Manager in Yonkers, to Assistant Treasurer, and Herman F. Schrull, of the trust department in White Plains, to Assistant Secretary.

Mr. DiYeso has been with The County Trust Company since 1941.

Mr. Schrull has been with the bank for 31 years and is a member of its Quarter Century Club.

* * *

Francis A. Smith, President of **The Marine Trust Company of Western New York**, announced April 19 the following appointments in the bank's municipal securities department: Homer R. Berryman, Assistant Vice-President, will become Manager of the department's Buffalo office; Edward L. Brown, Assistant Vice-President, will transfer to the New York office on or before Sept. 1, and Harry W. Faath, Jr., is appointed Assistant Vice-President in the New York office.

* * *

William F. Burke, President of the **Commonwealth Trust Company, Union City, N. J.**, died on April 16. He was 82 years old.

* * *

The election of Dr. Mason W. Gross to the Board of Managers of the **Howard Savings Institution, Newark, N. J., has been** announced by Waldron M. Ward, Chairman.

* * *

Stockholders in the **Monmouth County National Bank, Red Bank, N. J.**, and the **Atlantic Highlands National Bank, Atlantic Highlands, N. J.** will vote on May 23 on plans to consolidate the two institutions.

* * *

H. Pearce Wright has been appointed Vice-President in the Trust Department of **Mellon National Bank and Trust Company, Pittsburgh, Pa.**, Frank R. Denton, Vice-Chairman announced.

Mr. Wright began his banking career in 1927 with **The Union Trust Company.** Mr. Wright joined Mellon Bank in 1948, at which time he was named an investment officer, and in October of 1954, he was appointed Assistant Vice-President in the bank's Trust Department.

Frederick W. Burr and P. Knox Motheral, Jr., have also been appointed Assistant Secretaries in the Trust Department.

* * *

The First National Bank of Friendsville, Md., with common stock of $25,000 has gone into voluntary liquidation by a resolution of its shareholders on March 29, effective April 2. Absorbed by; **The First National Bank of Oakland, Md.**

* * *

The Old Dominion National Bank of Fairfax County, Annandale, Va., was issued a charter on April 1. The President of the bank is Edwin T. Holland, the Cashier is Joseph L. Malone. The capital is $200,000 and the surplus is $472,-830.84. This is a conversion of **The Bank of Annandale, Va.**

* * *

James J. Nance, is the newly elected President and Chief Executive Officer of **Central National Bank of Cleveland, Ohio.** The election of Mr. Nance, was announced by Loring L. Gelbach, Chairman and President.

Mr. Gelbach, who has been Chief Executive Officer since 1945, will continue as Chairman. Mr. Nance will assume his new duties as soon as personal affairs permit.

* * *

The American Fletcher National Bank and Trust Company, Indianapolis, Ind., increased its common capital stock from $6,798,120 to $9,064,160 by the sale of new stock. Effective April 8. (Number of shares outstanding 906,416 par value $10.) The proposal for the increase in stock by the Directors of the bank, at a special meeting, was given in the March 3 issue of the "Chronicle" on page 981.

* * *

By a stock dividend, the **National Bank of North Chicago, Ill.**, increased its common capital stock from $100,000 to $200,000. Effective April 7. (Number of shares outstanding 10,000 par value $20.)

* * *

By the sale of new stock, the **Aurora National Bank, Aurora, Ill.**, increased its common capital stock from $420,000 to $525,000. Effective April 7. (Number of shares outstanding 21,000 par value $25.)

* * *

The St. Clair Shores National Bank, St. Clair Shores, Mich., by a stock dividend, increased its common capital stock from $200,-000 to $240,000, and also by the sale of new stock, from $240,000 to $360,000. Effective April 4. (Number of shares outstanding 36,000 par value $10.)

* * *

By the sale of new stock, the **Coral Ridge National Bank of Fort Lauderdale, Fla.**, increased its common capital stock from $500,-000 to $600,000. Effective April 6. (Number of shares outstanding 60,000 par value $10.)

* * *

Lewellyn A. Jennings, has been elected a Senior Vice-President and member of the Executive Committee of the **Republic National Bank of Dallas, Texas**, it was announced April 18 by Karl Hoblitzelle, Chairman of the Board; Fred F. Florence, Chairman, Executive Committee; and James W. Aston, President of the bank.

* * *

By the sale of new stock, the **First National Bank in San Rafael, Calif.**, increased its common capital stock from $1,500,000 to $1,-750,000. Effective April 4. (Number of shares outstanding 175,000 par value $10.)

* * *

Bishop National Bank of Hawaii, Honolulu has changed its name to **First National Bank of Hawaii.**

* * *

Scott V. P. of Istel Lepercq

Stanley Z. Scott has become associated with Istel, Lepercq & Co., Inc., 63 Wall Street, New York City, as Vice-President and Director of investments.

With Mitchell Hutchins

Douglas J. M. Graham has become associated with Mitchell, Hutchins & Co., 1 Wall Street, New York City.

Form Coldwater Corp.

(Special to THE FINANCIAL CHRONICLE)

BURBANK, Calif. — Coldwater Corporation has been formed with offices at 514 South Glen Oaks to engage in a securities business. Officers are Robert D. Keillor, President; Ray David, Vice-President and Kenneth E. Nuckolls, Secretary-Treasurer.

Forms Farr Inv. Co.

(Special to THE FINANCIAL CHRONICLE)

JACKSONVILLE, Fla.—Farr Investment Company has been formed with offices in the First Federal Savings Building to engage in a securities business. Officers are A. P. Farr, President; G. M. Farr, Vice-President; and I. V. Thompson, Secretary.

BANK AND INSURANCE STOCKS

BY LEO I. BURRINGTON

This Week — Bank Stocks

THE BIG BANKS OF TEXAS

The large State of Texas has the distinction of housing more commercial banks than any other state, since branch banking is illegal. In order to gain a more meaningful perspective, Texas ranks fifth in total bank deposits and total assets, and sixth in capital accounts. Six of its banks are among the 100 largest in the nation. The banking position of Texas gains further significance when correspondent banking is considered. Interbank deposit holdings are sizable with only New York and Illinois outranking Texas.

These demand balances due from banks are relatively most important in the Dallas 11th Federal Reserve District, among all districts, accounting for considerably more than 10% of total bank deposits held. The banks in Dallas lead, followed by Houston and Fort Worth, respectively. The high ratio of bankers' deposits to the total again reflects the banking structure in Texas with its large numbers of banks, which is approaching 1,000, and the prevalence of many small banks. As long as the establishment of branches is limited this trend will continue. The percentage of bankers' deposits to the three largest Dallas banks by a 1959 measurement were 27.3%, 22.7% and 18.4% for First National Bank, Republic National Bank and Mercantile National Bank respectively. Among the large Houston banks the percentages were 24.9% for First City National Bank, 18.4% for Bank of the Southwest, and 11.2% for the National Bank of Commerce.

Of course the same conditions causing branch banking growth in other areas of the United States prevail in Texas even though such banking is outlawed. Commercially and residentially, the banking needs are growing in suburban areas. The leading city banks have met the situation by stepping up activity in suburbs Texas style, through affiliate banks.

The affiliate banks are controlled by stockholder groups of the big banks. In Texas a corporation can have controlling interest in only one bank, although it can own about 25% of the stock in as many other banks as it wishes. However, as an individual, many people in the banking fraternity can own controlling interests in

The Leading Texas Banks

	Approx. Bid Price Range 1960-1959	Recent Mean Price	Indic. Div.	Yield	Oper. Earns. 1959	Common Shares Outstdg.
Republic Natl. Bank, Dallas	83 - 56	75	$1.68	2.2%	$2.89	3,944,435
First National Bank, Dallas	42 - 35	39	1.50	3.8	2.26	2,600,000
First City National, Houston	47 - 35	44	1.25	2.8	2.63	2,750,000
Bank of Southwest, N.A.	59 - 43	58	1.80	3.1	4.31	781,250
National Bank of Commerce	139 -106	136	3.00	2.2	6.05	577,500
Mercantile Natl. Bank, Dallas	34 - 31	32	1.28	4.0	2.14	1,500,000

many banks limited only by funds at their disposal. Texas also has led the nation for several years in the number of new banks established. Of the 121 banks opened last year, 20 were opened in Texas. Many of the newer banks locate in shopping centers. Several clashes among banking interests have been publicized, since a banker frequently is behind most new bank charters. In other words, even though branch banking is not permitted, there are many same stockholders in the different banks. Among motives for this practice is the desire to increase big banks' deposits, providing the base for taking on more loans.

At least to the layman, Texas is not known for strict legislative laws relative to other states. A recent ruling by the State Supreme Court of Texas is a case in point. It stated that Savings and Loan Associations must have approval from the State Banking Commissioner to open branches. This annoyed the opposition who stated such institutions had been chartered, and branch offices were opened without the Commission's approval for 20 years. Another controversy is to be aired later this month—whether or not bank offices on government installations in Texas, to service the military, are legal.

With apologies to all Texans in describing the opportunities to be found in Texas the following points seem worthy of note for interested bank stock investors. The State produces almost half of the nation's output of oil, natural gas and synthetic rubber. Not only is Texas the leading producer of many minerals, it also leads in such raw materials as cotton, wool, cattle, sheep, rice and peanuts. With an above average population growth, additions to the present estimate of close to 10 million people is another favorable factor. Texas claims to be the principal air-crossroads center, based on its many major airports serviced by 10 commercial airlines. The final clincher is that life in Texas is good. In short, Texas has experienced a phenomenal transformation from an agricultural and oil economy to a combined industrial-oil-agricultural economy. Important further strides in manufacturing can be anticipated. The State at present is a leader in chemical manufacturing, petrochemicals in particular.

For the banks in Texas it means the financing of the rapid industrial growth in the Southwest.

This growth already has placed several of the Texas banks among the leading U. S. banks. Several of them have been alert to the State's potential and are ready with financial assistance. For 1959 net operating earnings of member banks in the Eleventh Federal Reserve District increased 14% over 1958 results. Higher interest rates on loans were the most significant factor for turning in a profitable year. However, with higher interest paid on time deposits, operating expenses continued to mount. For reserve city banks the ratio of loans to deposits rose from 46.9% at the end of 1958 to 50.3% at 1959 year-end. In order to meet loan demands and maintain deposits subscription rights are not uncommon or are stock dividends for increasing the bases for loans.

Thus far in 1960 the trend toward lower deposits prevails for Texas banks as for the industry generally, but due to high interest returns profits for 1960 are expected to exceed 1959 results. Several Texas banks have income from other than banking sources, such as dividends received by the Republic National Bank of Dallas from its Howard Corporation's oil interests.

Bank Women to Hold Conference

The Tri-Regional Conference of the National Association of Bank Women, to be held at Haddon Hall, Atlantic City, N. J. will begin on April 29, 1960.

Registration will get under way at 10:30 a.m. Mrs. Marion Anderton, vice president of the Association, and assistant secertary of the Bank of America, San Francisco, will preside at the Workshop Session at 2:00 p.m. This will be followed by dinner in the Rutland Room. Miss Elizabeth M. Quinham, regional vice president, New England Division, and assistant secretary, Rhode Island Hospital Trust Company, Providence, R. I., will preside and Miss Flora B. Sheppard, associate member, will give the invocation. Miss Helen C. Rathbun, conference chairman, and assistant trust officer of Guarantee Bank & Trust Company, Atlantic City, New Jersey, will welcome the group. Mrs. Marion Anderton will extend greetings to the group.

John R. Bunting, Jr., Business Economist, Federal Reserve Bank of Philadelphia, Pa., will deliver an address on "The Business Outlook."

There will be three Regional Breakfasts on Saturday, April 30, from 8:00 a.m. to 9:15 a.m. in the Mandarin and Tower Rooms. Miss Helen L. Rhinehart, president of the Association and vice president and secretary, Brenton Companies, Des Moines, Iowa, will preside at the Business Session which will be held in the West Room.

From 10:45 a.m.-12:30 p.m. a member panel, moderated by Miss Elizabeth A. Neilan, assistant secretary, Plantations Bank, Providence, R. I. The subjects to be discussed will be: "Budgets and Home Ownership" by Miss Beth W. Jefferson, assistant treasurer, Woodbury Savings Bank, Woodbury, Connecticut; "Investments—Pure and Simple" by Miss Dorothy R. Funck, assistant vice president, Irving Trust Company, New York, N. Y.; and "Tax Observations, Gimmicks & Pitfalls" by Miss Mildred E. Foy, trust officer, The Riggs National Bank, Washington, D. C.

At 1:00 p.m., the group will meet for luncheon in the Rutland Room, where Miss Mary L. Chadwick, regional vice president, Middle Atlantic Division and assistant trust officer. The Riggs National Bank, Washington, D. C., will preside. The invocation will be given by Mrs. Virginia L. Hall.

Mrs. Iva Gorton Sprague, International Observer and Reporter, Corning, N. Y., will address the group. Her topic will be "Russian Journey."

The afternoon will be free. At 6:00 p.m. there will be a Reception in the Garden Room, Lounge Floor. The Banquet will be held in the Rutland Room at 7:00 p m Miss Ruth R. Roy, regional vice president, North Atlantic Division and assistant secretary, Security Trust Company, Rochester, N. Y., will preside. Rt. Reverend Monsignor John J. Henry of Atlantic City will give the invocation.

Greetings will be extended to the group by Miss Helen L. Rhinehart, president of the Association.

The Honorable G. Russell Clark, Superintendent of Banks, State of New York will deliver an address on "The Potentials for Banking in the Sixties."

On Sunday, May 1, brunch will be served in the Rutland Room at 10:30 a.m. and Miss Helen C. Rathbun, Conference Chairman, will preside. There will be a group prayer.

The Conference will close with an address by Mrs. Emily Womach, secretary and assistant cashier, The Sussex Trust Company, Laurel, Del. Her topic will be "Dollars and Sense Investment in People."

J. W. Andrus Opens

BISMARCK, N. Dak.—James W. Andrus is engaging in a securities business from offices at 901 Midway Drive.

Continues Business

(Special to THE FINANCIAL CHRONICLE)

PASADENA, Calif. — Marlene Hess is continuing the investment business of Market Research Associates, 108 South Los Robles.

J. D. Mayor Opens

NORTH MIAMI BEACH, Fla.—J. Donald Mayor is conducting a securities business from offices at 1061 Northeast 178th Terrace.

Expanding Science Frontiers And World of Electronics

Continued from page 1

that "science" and "electronics" are not synonymous. I would even say that, from the investment viewpoint, there is no such thing as an electronics industry.

By classical definition "electronics" refers to any product, cluster of components or service that depends on a vacuum tube or its equivalent, such as a transistor. In this context electronics is said to be a $15 billion industry. But, within it are radio and television sets, a cut-throat business no different from refrigerators or waffle irons. There are 40 cent radio receiving tubes and $10,000 microwave klystron tubes, $10 hearing aids and $2 million computers, simple 2 cent connectors and research programs aimed at global communication via satellite relays. About $5 billion is service, i. e., broadcasting, retail mark-ups and repairs.

Obviously, the enterprising investor is looking for more than a stake in an industry that, besides its dynamic segments, has large static areas. I believe such an investor is seeking growth, the kind of true growth that comes from new products that create new markets. New products and new markets are the fruits of "applied science," a term that emerges as a more useful investment concept of an industry.

There are many applied sciences. A good example is drugs. In the future when you think of space age and electronic stocks, I would ask you to use the analogy of drugs because the drug industry is based upon specific sciences, such as biology and chemistry, out of which come new products. In drugs you are not investing in products, you are investing in the brain power that can create an endless stream of new products. The same is true of all applied sciences.

Other examples of applied science include metallurgy, optics, photography, organic and inorganic chemistry, plastics, physics, and so on. However, due to space limitations we can only skim over the highlights of physics and touch a few other areas in this article.

Having debunked "electronics" as being both too narrow and too broad to cover the promising areas of scientific growth, our new method can be summarized in three steps:

First, select specific areas of applied science that are attractive because they are on the frontiers of discovery and application.

Second, select companies that provide maximum exposure to these specific areas of applied science, i.e., an appreciable portion of their revenues comes from these technologies.

Third, consider the equity base (market price times shares outstanding) and, other things equal, favor the smaller companies.

In addition, our new theory has four important "ground rules." They are:

After selecting specific technologies and determining the investment media offering maximum exposure, the investor must consider which companies have competent technical staffs, i.e., those that will continue to extend the frontiers of their art. Secondary companies, the "me too" variety, may copy a technical end product and make a momentary profit. But they will fail in time without original minds who can keep apace of obsolescence.

It is better to invest in components or basic sub-systems than in end products or total systems. For example, missiles have a bright future, but of the many being developed only a few will finally get off the launching pad. But, no matter which missile goes up, it will use transistors, diodes, rectifiers, microwave tubes, new metals, exotic fuels, computers, and complex test and tracking equipment.

Buying a sophisticated component or basic building block to take advantage of the exciting things happening in thousands of new equipments and systems is like buying the oil industry through Halliburton Oil Well Cementing. You minimize risk, yet cover the waterfront through one investment vehicle.

The second ground rule is to avoid consumer applications. Concentrate on military and industrial markets. By the time a science-born product becomes cheap enough for civilians, its technology has become well known and the criterion of success is no longer technical know-how but, rather, mass production and mass marketing. Television is a good example.

The third rule is that all rules have exceptions. Where a franchise exists, for example in the rare cases of basic patents such as those of Polaroid, or in the high birth rate of new products by the drug companies due to their already established positions, the consumer market can be attractive. Or, if a system is sophisticated enough and its leading exponent is years ahead of the competition, like Farrington's reading machines, it too will get our nod of approval.

This overall new approach should not be considered the Golden Rule. There are many fine companies that will not qualify, such as IBM because of its large size, or RCA because of its widespread activities. In addition there are companies that make relatively mundane products but which have superlative managements. Therefore, treat this new approach as a guide.

When it comes to the investment mechanics and methods of stock appraisal in the science field, we must discard many classical investment rules because they simply do not apply.

For example, the principal asset of a good science company is brain power, usually in the form of one or more outstanding experts. Therefore, low book value compared with price, has little meaning.

Another classical predilection we must dismiss is the love of dividends. Fast-growing companies simply can't afford to pay out cash. The appearance of a significant cash dividend often is the sign of an unattractive stock.

Then, we must learn to live without some of the amenities we cherish in more pedestrian equities. Many of our choices will not have the reassuring ring of the social register, being young, relatively unknown companies.

And, listing of shares on an exchange is a sort of graduation. Wonderful developments may still be ahead, but think of the percentage growth that took place in nursery, kindergarten and elementary school! This, of course, is the over-the-counter market where all successful companies get their start. Therefore, particularly scrutinize unlisted stocks.

Another popular prejudice is the preference for large companies. Most of the seasoned, well-managed, broadly based companies in the technical field, are committed to one or several of the intriguing new technologies. But, their very size and, in many instances, also their substantial interest in other less dynamic phases, mean that success in any one new technology will not "make" them, just as failure will not "break" them.

Thus, the chances of capital appreciation, if also the risks, are increased measurably by selecting companies that give maximum exposure to a specific technology, and, compounding both success and risk, companies with a sufficiently small equity base. Other things being equal, the small company in the right field with good management and technical staff, will turn in better investment results.

This does not mean one should concentrate on small companies indiscriminately. The different requirements of different investors must be recognized. A large company giving good exposure to one or several specific technologies is suitable for institutional and conservative clients. But, for the businessman and the intelligent speculator, a package of small companies is more appropriate.

Diversification still has a place in our new approach but it does not apply to the company. There is nothing wrong with a specialized company, provided it is an interesting area of specialization. Ampex, Electronic Associates and High Voltage Engineering are specialized companies. We achieve diversification by buying a package of specialized companies. In a well-chosen package of at least six companies, each specializing in a different technology, the winners should more than make up for the laggards.

The price-earnings multiple is a particular bug-a-boo. In extreme cases it has little value. We will all agree that a company losing money nevertheless has value, often substantial. What is its multiple? On the other hand, what should the multiple be for a company, usually typical of a good science issue, that is compounding its growth at 30% to 50% annually for, possibly, five more years before a slowdown occurs? Is 30 times earnings, or even 50 times, too high for a double of per share earnings every two years for probably some time out, as in the case of Polaroid? The market is saying "no" and I agree.

When a promising science company is in an early phase of its development, with most of its efforts in research and product development, and there are no, or little earnings, I am willing to pay a price that values its equity up to three times its revenues. In exceptional cases like Farrington, where the potential is unusual, I will go even higher. Therefore, the ratio of market value to revenues is more meaningful in some cases than the traditional price-earnings multiple.

Obsolescence, competition and price cuts have an unfamiliar significance because these nightmares of conventional industry often are bullish factors, not bearish, in applied science.

Price cuts in transistors for industrial and military applications, for example, broaden the market and capture new markets. Competition in the early phase of a new technology, such as infrared or reading machines, develops a commercial market more rapidly. There usually is ample room for several good producers to prosper before a new industry's maturity is reached many years away. Obsolescence is a dynamic factor. Good science companies are always bent on obsoleting their own, and their competitors' products. Remember the analogy to the drug companies which, over the long run, survive and grow because of product obsolescence.

An interesting thing about new scientific developments is that usually they do not replace anything. The transistor was supposed to replace the vacuum receiving tube. Yet, vacuum tube sales will be higher this year than ever before, because the market for industrial and specialty tubes is growing rapidly. By the same token I believe that when the tunnel diode becomes a commercial product in three years, transistor sales will continue to rise. Basic technologies create end products that never were possible with the old components and techniques. Computers that we use today could not have been designed around vacuum tubes. The new products of science primarily create new markets. This is the essence of growth.

Finally we must deal with investor psychology. Most investors sell too soon. A good vehicle in science has long term validity. When such a company is found and proves itself ride it all the way. Shoot for 500% and 1000% appreciation. These are not unrealistic goals. Don't succumb to the human weakness to sell on a double. Use periods of market reaction to accumulate more stock because a winner usually continues to be a winner.

Some investors have another problem in their inability to buy a growth stock that has risen sharply or which is selling at its high. Any time in the past five years when you bought Polaroid it probably was selling at a historical high. The important thing is future potential, not history.

I will now enumerate specific technologies that I consider attractive because they are new, they present formidable technical problems, and they are prominent among the basic building blocks of the entire scientific revolution.

I will also indicate those companies that provide meaningful investment exposure. However the names mentioned are mainly for illustration. They are not all timely nor do I consider all of them attractive. Also the list is not all-inclusive. Keep in mind that in this article I am presenting a philosophy. I am not touting a list of favorite stocks.

I must caution further that once an investor has a clear philosophy of what he wants to do and why, the execution of an investment program must be done with the help of an expert, a security analyst who specializes in science-oriented companies. (I don't believe in obsolescence when it comes to my own profession.)

Seriously, though, the investor must consult an expert because many companies are not what they appear to be. For example, some companies with the word "transistor" in their name do not make transistors or any semiconductor products. Also, there are many companies with "electronics" in their name and other romantic, emotion inspiring expressions, that actually are nothing more than glorified machine tool operations. Finally, there is the need for appraisal of technical ability and continual watchfulness, that only the professional can do properly.

Photochemistry, or photography, is attractive because, in addition to its great further potential in military and industrial applications, it serves the consumer leisure-time market. Here, Polaroid still is my choice as one of the great growth stocks of our time, having tapped less than 5% of its market—with color still to come! For those who must have a name in exchange for slower, albeit adequate growth, there is, of course, Eastman Kodak. Bell & Howell is a possibility, as there is little else to choose from until General Analine becomes available in more plentiful quantities. Fairchild Camera and General Transistor have stakes in new photographic concepts, but they pass the test on other scores and need not prove themselves here. Haloid also must be considered, and it ranks high in my book, because of its Xerography process, a special form of photography.

In applied science there are three gems that stand by themselves. They are so strong technically, that they virtually are the entire industry within themselves. They are: Ampex in the field of magnetic recording, (GE notwithstanding); High Voltage Engineering in the field of synthetic radiation and ion propulsion (space craft of the future may be propelled by atomic particles generated from synthetic radiation generators); and Electronic Associates in the field of general-purpose analog computers.

Solid state physics, one of the most important and dynamic areas of applied science, deals with the control of electron flow in "semiconducting" substances such as silicon, germanium, arsenides, tellurides, aluminum alloys, certain plastics, tantalum, and many others. Most investors think of this technology as being "the transistor business." Actually, the transistor, of which there are hundreds of non-comparable types, is only one product type. Solid state physics has also given us whole families of diodes, rectifiers, and solar cells. In the immediate future it will yield tunnel diodes (that won't displace transistors, the prophets of doom notwithstanding) and controlled rectifiers. All of these devices are more efficient and smaller analogies of vacuum tubes.

In commercial terms solid state physics has only recently become explosive. Its first product, a transistor, was developed in 1948. By 1955 sales were $35 million when they began to soar, reaching $350 million last year. Within five years experts see a $1 billion market in only those devices presently in use or in late development.

In addition, in five to ten years solid state physics will create three entirely new industries, each potentially another $1 billion market in itself. They are: thermoelectricity, the direct generation of electricity from heat; electronic heating and refrigeration for industry and the home; and electroluminescence, panels of built-in light for general illumination.

A curious thing about solid state physics and the other technologies that we mention here, is that when you count the number of companies that provide meaningful investment exposure you discover there are a frighteningly small number of eligible vehicles. In several technologies there is only one company that makes sense. The good side of this deplorable condition is that stock selection is greatly simplified.

There are only seven companies, in my opinion, that provide meaningful exposure to solid state physics. The already large Texas Instruments and Transitron, whose equities sell in the market for some $800 million and $350 million, respectively, are the investment-grade issues. Fairchild Camera, Philco and General Instrument, in the $50 to $160 million class of market value, are the industry's "red chips," not too far from institutional acceptance. The speculation is General Transistor, at the moment suffering growth pains and acquisition indigestion, but selling for only $20 million and showing signs of recovery. The best all-around vehicle, already deserving institutional approval, yet whose $35 million equity base still allows for fireworks, is International Rectifier which goes on the Big Board soon. The gambles are Industro Transistor, Silicon Transistor and Columbus Electronics. Among somewhat better high-risk speculations that are still closely-held, though someday to come to market, I hope, are Solid State Products, National Semiconductor and Continental Devices.

"Passive" electronic components, such as capacitors and resistors, are needed in new configurations, parameters and materials for use in circuits alongside "active" components such as transistors and diodes. In this important field Sprague Electric is dominant and is the quality issue. International Resistance and Aerovox are the valid speculations. If and when Tansistor (not misspelled) comes to market, it will be an outstanding speculation in tantalum capacitors.

In the area of new "electronic metals," particularly tantalum, Fansteel Metallurgical is the large factor, but my choice is the much smaller Kawecki Chemical.

Ultrasonics, or "silent sound" is experiencing dramatic expansion as a new, efficient method for cleaning mechanical parts and controlling liquid level and flow (for example, in missile fuel systems). It will soon appear in your

dentist's and doctor's offices, jewelry stores and watch repair shops, and even in your kitchen dishwasher. The technical leader and quality issue is Acoustica Associates, followed closely by Branson. The radical gamble is Ultrasonic Industries which is just starting out, in its business as well as in the unlisted market.

Microwave is one of the most important, promising basic technologies in applied science. It covers that section of the radio spectrum that begins where TV leaves off and it ends where infrared begins. It is high frequency, which has certain properties that make it useful in a broad range of applications as, for example, long distance telephony, missile guidance, computers, radar, satellites, telemetry, tropospheric communications and even electronic cooking.

In microwave technology we have a convenient component. It is the hard-to-make microwave tube. There are only two companies that provide meaningful exposure, Varian Associates and Eitel-McCullough. Bendix makes microwave tubes; so does RCA, GE, Raytheon, Westinghouse, Sperry Rand and Litton. However, you get the most exposure to microwave tubes per dollar of investment from Varian and Eitel-McCullough. Because of its larger size, broader technical base and longer seasoning Varian is the investment-grade issue. Eitel-McCullough, which is statistically cheaper but more speculative, is the semi-investment grade issue.

Another area of microwave that is attractive is microwave instruments and test equipment. Here again, you find a very small number of candidates. They are Hewlett-Packard, the giant and blue chip of the industry, and the much smaller but high technical quality Polarad (not Polaroid) and FXR which particularly appeal to me as enterprising speculations. Tektronix will be another quality company if it decides to become public. Microwave Associates ranks high as a good speculation, being involved in microwave tubes, solid state devices and mechanical components.

Data processing means digital business computers, the province of giant companies, lead by IBM, that grow 10% to 15% annually. They fit institutional portfolios well. However, the adventurous soul should look to "data handling" as a faster expanding, allied field. Here we find Friden as the leader in peripheral data input and output machines that serve the computer.

A special case in data handling is Farrington, which I rate as one of the great speculations, whose extraordinary risk is more than balanced by its extraordinary possibilities.

Farrington makes a machine that reads. It will optically read an invoice or page of text and reduce it to computer language. The Air Force has a Farrington machine that reads technical Russian literature. It is hooked into an IBM computer and out comes the equivalent English. The Post Office has a Farrington machine that reads the addresses on your mail and routes letters automatically. American Telephone has several Farrington machines that prepare and read your dividend checks. Other blue chip users include Readers Digest, Time, National Biscuit, First National Bank, Bankers Trust, Standard Oil of California, and Standard Oil of Indiana. This is one of the most exciting new developments in office automation and this company has a clear five-year head start.

Farrington is a risky stock. It sells in the market for about $70 million and has only about 30 installations in the field. It will lose money this year; it may break even next year. But think of the potential five years from now if it captures a good fraction of an estimated $500 million annual market! As for competition from Baird-Atomic (at least two years away) and eventually from IBM, RCA, Solartron of England and the many others to come, welcome it. We will reach automatic reading on a world scale that much faster.

"Information technology" is a new specialized area of data processing. Modern society faces greater danger from being buried under a mountain of red tape than it does from the radiation of strontium 90. We solved only one-half of the data processing problem with our electronic business computers, insofar as they only handle arithmetic. But there is another aspect of paper work that these computers cannot control; that is the actual original document, such as a letter, engineering drawing, photograph, map, etc. IBM is working on this problem of handling "graphic" data automatically. So are RCA, Thompson Ramo, Eastman Kodak, Magnavox and Itek. But Itek gives you maximum exposure because the bulk of that company's future activities will be in this new industry which will not enter a commercial phase for three to five years. But information technology will be a billion-dollar industry in the future. Itek was orginally financed by the Rockefellers. It has one of the outstanding technical groups in the field and, therefore, represents a brilliant long-term speculation.

Magnetics deserves our attention because there have been several exciting breakthroughs in the technology which have given this old field a new dynamic future. Ceramic magnets that are a magnitude stronger than conventional metal magnets, will create a revolution in the design of electric motors and, possibly, automobile power accessories. Ferrite magnetic cores and magnetic drums are the heart of data processing memory systems. The strongest company in the field and the investment grade issue is Indiana General which is slated to go on the Big Board soon. The interesting long term speculations are Telemeter Magnetics followed by Magnetics, Inc.

Infrared, on the radio spectrum, begins where microwave leaves off and it ends where visible light begins. It will have tremendous future application in the laboratory for analytical instruments, in the industrial plant for process control, along railroad tracks to spot hot boxes as trains speed by, and for space communication and anti-missile systems. Four small companies provide meaningful access. In order of preference they are Barnes Infrared, Baird Atomic, Infrared Industries and Servo Corp. of America. Perkin-Elmer and Electronic Corp. of America also have stakes in the field.

There are other specific technologies that deserve a place in this new approach, but there is the problem of space limitation. However, I want to mention two areas that have been omitted deliberately. The first is molecular electronics or "minitronics," which has attracted the fancy of the market. Under this concept an entire electronic circuit is compressed into the space of a miniature device that now performs only one function. I think this development is overrated because it probably will be uneconomic for many years, in the meantime finding application only in such places as satellites where space and weight are compelling considerations. However, this whole subject is academic to the investor who has a position in solid state physics because semiconductor companies are spearheading developments in this new field.

Another specific technology that does not appear interesting is nuclear energy. The huge capital resources required in this business permit only the industrial giants to participate, so the investor finds himself bumping up against the law of growth which says that big things do not display exponential growth. Radiation measurement and control instrumentation in nuclear applications is an extremely competitive field and a superbly managed, highly successful company like Nuclear of Chicago is the exception rather than the rule.

No doubt new technologies will appear in the future in commercial form, such as plasma physics, which involves the study of gases at extremely high temperatures and velocities. There is also a great frontier in geophysics.

Looking at geophysics, for example, it is not ironic that man has reached the moon before he could sink a three mile shaft through the crust of his own planet? I suspect that when we explore space we will find little or nothing of economic value except for the possibility of communication with other planets through radio astronomy, and the probability of global communication through stationary relay satellites.

I think man will be tethered to his tiny solar system of dead moons and unlivable planets by our short life span. Other solar systems and galaxies will be beyond our reach because their distance is measured in millions of years at the speed of light.

Therefore, I believe the last practical frontier that awaits man's conquest is at our feet and not above our head. It will be the bowels of the Earth that will unlock secrets of the origin and nature of the universe. More important, the fantastic pressures and temperatures that build up as we approach the molten metal core that accounts for over one-half of the Earth's 7,500 mile diameter, may yield new minerals or old ones with exciting new properties. A new source of cheap power might emerge from thermo-electric generators, designed around semiconductor elements, sunk into deep shafts where they would convert the Earth's inner heat directly into electricity.

Thus, the frontiers of science will ever expand and it is in the basic technologies of science that well planted dollars should grow vigorously.

Form F. Knight

(Special to THE FINANCIAL CHRONICLE)

MIAMI, Fla.—F. Knight & Company, Inc. has been formed with offices at 100 Biscayne Boulevard, South to engage in a securities business. Officers are F. Knight Jr., President; A. C. Schenholn, Jr., Vice-President; and W. C. Lewis, Secretary.

Investors Service

BALTIMORE, Md. — Investors Service of Maryland, Inc. has been formed with offices at 100 West 25th Street to engage in a securities business. Donald E. Kaufman is President; Laurence H. Meisner, Vice-President; and Gerald Sussman, Secretary and Treasurer.

Newport Finance Co.

(Special to THE FINANCIAL CHRONICLE)

LOS ANGELES, Calif.—Newport Finance Company is engaging in a securities business from offices at 818 West Seventh Street. Officers are Paul A. Appleby, President; Robert L. Marie, Charles W. Ferguson and Frank L. Speers, Vice-Presidents; Allan E. Weidman, Vice-President and Treasurer; and Edward L. Johnson, Secretary.

In Securities Business

CHICAGO, Ill.—Professional Casualty Agency Co. is engaging in a securities business from offices at 8 South Michigan Ave. Officers are Dr. Eli S. Jones, President, and Dr. H. Larchmont-Robinson, Secretary-Treasurer.

PUBLIC UTILITY SECURITIES

BY OWEN ELY

Oklahoma Gas & Electric Company

Oklahoma Gas & Electric has been in the electric business for 58 years; gas properties were disposed of in 1927. The company serves a population of 1,100,000 in Oklahoma and Western Arkansas, obtaining about 91% of revenues from the former state, and about 40% from the Greater Oklahoma City area. Other cities served include Enid, Shawnee and Muskogee in Oklahoma, and Fort Smith and Van Buren in Arkansas. Residential and rural sales provided 41% of 1959 revenues, commercial 30%, and industrial 18%.

Major activities in the area are farming, production of oil and gas, food and food processing, grain and milling operations, building materials, creameries and packing plants, machine shops, glass plants, etc. The largest customer, Tinker Air Force Base, accounts for less than 1½% of total revenues. While oil remains the largest single industry served, revenues from oil companies in 1959 amounted to only 9% of total revenues vs. 14% in 1940. The oil industry is in itself well diversified among pumping, refining and pipeline operations.

The company has shown excellent growth: in the past decade revenues increased 140% vs. a U. S. gain of about 109%, plant capacity 371% vs. 152%, and earnings applicable to common stock 174% vs. 140%.

At the end of 1959 the company's average investment per kw. of installed generated capacity was about $104, a remarkably low figure for this area; the company does its own construction work and has been able to effect many economies. The latest installation, a 240,000 kw. unit at Mustang installed last June, cost only about $94 per kw. The company's fuel cost per kwh. last year was only 1.44 mills compared with 3.10 mills for the U. S. in 1958. This economy has been effected by favorable long-term fuel contracts and the installation of large units.

1959 net peak demand of 790,500 kw. was at a record high level, up 77,400 kw. over 1958 despite an unusually cool summer. The 1960 estimate is for a 950,000 kw. peak; reserve margin is estimated at about 26% in 1960 and 16% in 1961. Construction expenditures since 1945 have approximated $250,000,000, equal to 86% of the present plant value. Expenditures totaling $103,000,000 are estimated for the 1960-1964 five-year program. No new generating units will be installed until 1963.

Capital ratios at the end of 1959 were 52% debt, 17% preferred stock, and 31% common equity; the company's present policy is to maintain the common stock equity at between 30% and 35%. It is presently estimated that the company will not do any permanent financing before 1962, which should permit the equity value to build up substantially. In 1962 the company may issue common stock on a 1-for-20 or 1-for-25 basis, along with senior securities.

Business was good in Oklahoma last year, a general index of business being 12% over 1958. Construction was at record levels, about 19% over 1958; residential starts gained 33%. It is expected that this strong building trend will continue in the Oklahoma City area. Western Electric is completing a large new plant, with the number of employees expected to increase to 4,500. The Federal Aviation Agency is adding about $5.5 million new physical plant or an increase of over one-third. Tinker Air Force Base is also being expanded and construction is under way on an addition to the Federal building.

The regulatory climate seems generally favorable: in 1954 the two state commissions (Oklahoma and Arkansas) gave the company exactly what it had asked for, after brief proceedings. The company is now earning about 6% on invested capital.

Share earnings did not show any great change during the period 1947-53 but since the latter year have increased steadily from 95c to $1.46. The interest credit on construction in 1958 was 17c and in 1959, 12c — the decrease largely explaining the gain of only 1c in 1959 share earnings. It is estimated that 1960 earnings will be about the same as 1959. The company is not using liberalized depreciation.

Common stock cash dividends have been paid each year beginning in 1909. The stock has been publicly held only since 1947, and since that year the dividend has increased in each year except 1954. Dividends were 27% "tax free" in 1958 and 30% in 1959; it is estimated that they will be 12% tax-free in 1960, but this advantage will disappear in 1961.

Construction in 1960 is budgeted at only $13 million, the lowest since 1953, and another decline in the interest credit for construction appears likely (for the first two months of 1960 the credit was only about one-tenth of the amount for the same period in 1959). Net income in the first two months declined about $150,000 compared with a loss of $180,000 in the interest credit. However, kwh. output in the first quarter was about 8% above last year and earnings were slightly above the budget.

The company's letter to stockholders dated April 15, 1960, contained the following interesting item regarding the growth of electric heating: "Most of the new apartment units being constructed in Oklahoma City are all electric. Since the first of the year, new all-electric apartments opened are the Meridian Terrace Apartments with 40 units using heat pumps, the La Villa Apartments with 30 units using heat pumps, and the Bill McIntire Apartments with 12 units using resistance heat. The prospects appear very favorable for apartments in the planning or construction stage to add 314 additional all-electric units."

Oklahoma Gas & Electric has been selling recently around 31½ and based on the current dividend rate of $1.12 the yield is about 3.6%. Based on the earnings of $1.44 for the 12 months ended Feb. 29, the price-earnings ratio approximates 22.

Marine Trust Appoints Three

Francis A. Smith, President of The Marine Trust Company of Western New York, has announced the following appointments in the bank's municipal securities department: Homer R. Berryman, Assistant Vice-President, will become manager of the department's Buffalo office; Edward L. Brown, Assistant Vice-President, will transfer to the New York office on or before Sept. 1, 1960; and Harry W. Faath, Jr., is appointed Assistant Vice-President in the New York office.

AS WE SEE IT

Continued from page 1

sort of international dealings were dealt a crushing blow from which they have not to this day recovered.

Communist Behavior

And one of the reasons they have made little or no recovery is to be found in the behavior of the leading communist nations in more recent years. The utmost in cynicism in the Soviet Union and Communist China developed, partly at least, as a result of the behavior of Germany and Japan at an earlier date, but whatever the explanation there was little or nothing in the doings of either Stalin or his Chinese counterpart in the earlier post World War II years to encourage faith in the words of other nations. Contempt for articles of agreement or understandings seemed to be a major characteristic of Communist faith. It is far from clear even at this date that this situation has undergone radical change. It is hardly surprising that this country, at least, should want to keep itself informed as to the degree in which commitments by the communist nations are being honored. The memory of Pearl Harbor is too fresh in many minds, as indeed is the astounding disregard of the pledged word by Stalin.

But these are but some of the more superficial aspects of a situation that touches not only armaments and related matters but the ordinary trade among the nations of the world. There has been a long-term trend away from anything approaching internationalism which the Wilsonian efforts did not succeed even in checking. The ultra-nationalism which has now become general has been strengthened by the rise of communism which has as one of its basic tenets the domination of the world. Not only is this ultra-nationalism one of its major characteristics, but another of its tenets appears to be that the end it seeks—communizing of the world—justifies virtually any means used toward that end. The pragmatism of the present leader of Soviet communism has seemed of late to suggest some changes in technique at least in its relations with the rest of the world, but how trustworthy any such change or appearance of change is to be regarded is far from clear at this time.

Unrest Abroad

It so happens that this rise to power of communism and its freshened determination to bring the remainder of the world under its domination have coincided with a spirit of unrest and dissatisfaction among the peoples of the world which have a history of foreign domination and are now in a backward state of economic development. These so-called backward peoples have developed an intense feeling of nationalism and of resentment toward their former foreign rulers. They are also developing a sense of their own low economic status. This makes excellent fishing waters for communist agents who promise all manner of things in an endeavor to win these peoples to the communistic yoke. In some cases at least, especially in the case of Russia, this type of evident imperialism is in substantial part at least a continuation of the imperialism of the Russian nation through many decades, not to say centuries.

Another complication which is not so obvious to the uninitiated is the growth during the past three decades or so of the belief that the way to improved economic position is to be found, not in meeting the competition from other countries and other economies with greater efficiency and productivity, but in shutting oneself off from that competition into a "closed economy" and then tinkering with the economic system to produce the results desired. Of course, lack of foreign competition—or too little of it—soon brings its own reward in higher costs and various types of abuse which can then flourish. Once that occurs, then it is more than ever difficult to envisage letting down the bars at all to permit foreign competition to enter.

Fruits of Protectionism

One result of all this is to develop throughout the world a number of semi-closed economies with varying degrees of inefficiency. Where protectionism has run riot for long periods, costs are all but inevitably higher than in other countries where competition from abroad is permitted in greater degree. Of course, other factors too have entered into the development of varying degrees of productive efficiency—some of them growing more or less inevitably out of World War II. But the fact is, in any event, that we have these various degrees of productive efficiency throughout the world and those who have suffered the most drastic deterioration are little inclined to do what is necessary to compete with other countries where productive efficiency is still not so badly deteriorated.

Obviously, here is a complicated set of conditions which are not likely to be quickly relieved, but that is no reason why every effort should not be made to get started.

How to Check Recessions And Foster Real Growth

Continued from page 13

while bond prices have risen, and there can be little doubt that security markets are at last registering doubts whether our age must, after all, continue to be an age of inflation.

I have dwelt on the course of recent events because they demonstrate that while the forces making for inflation are strong in our times, they can be brought under control if public and private policies are directed resolutely toward this objective. Fortunately, fears or hopes of inflation have now subsided, the confidence of investors — both domestic and foreign—in our nation's ability to pursue wise financial policies has been greatly strengthened, and there are fewer misgivings today about the dollar being the strongest currency in the world.

Warns Against Too Tight a Policy

But there is always a tendency for public sentiment to oscillate from one extreme to another. Of late, the opinion has repeatedly been voiced that inflation has been stopped and that we need no longer be concerned about it. This, I think, is probably true of the immediate future. Highly restrictive credit policies have served their purpose. For the time being, they are no longer necessary and there are already signs of some relaxation. However, the problem of inflation is and will remain a serious long-range problem for our economy.

Let us not overlook the vital fact that it is the established policy of our government to counteract, on whatever scale may seem necessary, any business recession that may develop. If this policy prevails, the level of aggregate demand for commodities and services will not decline sharply, nor will the level of employment. But an economy that is never very far from a position of practically full employment is nearly always in danger of generating inflationary pressures. This is a central feature of our new world.

Some students who recognize this fact have therefore urged that the way to repress inflationary tendencies over the long run is to be less zealous about checking recessions. This, I fear, would only add to our troubles, both domestically and internationally. Extensive involuntary unemployment has never been a virtue of an economic system. In our times it has also become politically unacceptable. Our real need is surely not to weaken anti-recession policies, but to improve them so that they will be less likely to release inflationary forces.

The best time to think about anti-recession policies is not when the economy is faltering, but when it is strong as at present. To be sure, no one can tell how to deal with the practical details of a recession until it reveals its precise shape. But we know enough of the general character of recessions to be able to think of some ways of handling them that may prove better than others.

Recession Cures and Balances Of Payments

It is important that we try to do so because the deficit in the balance of payments has diminished our effective range of freedom in dealing with recessions. For many years we were able to conduct our economic affairs without regard to stocks of gold, without regard to foreign holdings of liquid dollar assets, without regard to the level of prices here relative to the level abroad, without regard to the level of interest rates here relative to the level in foreign money markets. This freedom we no longer have.

If a recession developed in our country but not abroad, any sharp easing of credit conditions by the Federal Reserve authorities would facilitate the flotation of foreign securities in the American market. At the same time we would run the risk of causing a reduction of foreign cash balances held here and of stimulating a flow of short-term American capital abroad. Such movements might well occur because, under the assumed conditions, interest rates in foreign money centers would run considerably higher than domestic interest rates.

Nor is this all. If very easy money conditions here led to uncertainty among foreign bankers and investors about the soundness of our financial policies and to fears that the dollar might be devaluated, the normal adjustments to interest rate differentials would be aggravated by speculation. A gold crisis would be the consequence of such a train of events.

All this does not mean that we will need to live permanently or even in the near future with the high interest rates of the recent past. It does mean, however, that unless the balance of payments is righted, our economy is unlikely to benefit during the next recession from such easy money conditions as prevailed during the recessions of the postwar period.

But if the scale of prudent action along monetary lines has been reduced for the foreseeable future, what constructive steps might we take in the event that another recession developed? I believe that action on several fronts can be usefully taken.

Bracing Our Anti-Recession Weapons

First, we should not wait until the next recession strikes before we reform the first line of defense against recession—namely, our unemployment insurance system. In 1958 the Congress responded to urgent demands to extend the duration of unemployment benefits. But the legislation was drawn up in an atmosphere of haste. It failed to embrace all of the states. It did not deal at all with the matter of coverage or the size of benefits. In any case this legislation has already lapsed.

As matters stand, some 14 million workers are still entirely unprotected by unemployment insurance. The level of weekly benefits is still inadequate in some states. In view of the experience gained during the recession of 1957-58, recent state legislation has properly emphasized lengthening the duration of benefits. Last year 16 states increased the regular duration provisions. A more significant development is the provision by six states for an automatic extension of the duration of benefits when unemployment reaches a specified percentage. These improvements by the states are encouraging, but we need to make faster progress.

We can do this best by reform on a national level. In time we are bound to do so. I think that delay merely exposes us to unnecessary economic and political risks.

Once we achieve a system of unemployment insurance that covers practically all employees and provides benefits — with regard to both amount and duration—that are better suited to our times, two important advantages will be won in dealing with recessions. First unemployment benefits will offset to a larger degree the decline of wage income and thereby serve more effectively as a brake on the decline of economic activity. Second, since the problem of personal security will be much less acute, we will be able to develop policies for restoring economic activity in a calmer atmosphere than has ruled in past recessions. This should give us some protection against inflationary adventures.

We need also to clarify our thoughts—and the sooner we do so the better — on what kind of fiscal policy to pursue in the event of a recession. It is naive to believe that if the government has no program for dealing with a recession, we will merely get fiscal inaction. It is more probable, if history is any guide, that we will move instead in piecemeal fashion, that we will increase spending grudgingly yet repeatedly as political pressure mounts, adding a little today on this and a little more tomorrow on that, only to discover when the total is added up that a larger commitment has been made than the gold programs previously denounced as extreme would have required.

The practical choice among lines of fiscal policy is limited at a time of recession and none will prevent a deficit. First, expenditures could be left to their normal course. Second, they could be stepped up. Third, tax rates could be reduced. These are not the only actions possible, but they are the only ones we need reckon with.

If the recession were mild, if encouraging signs of recovery appeared early, and if there were no great public clamor for governmental action, I have no doubt that it would be desirable to leave both Federal expenditures and tax rates alone. But if these favorable conditions are not fulfilled, a choice will need to be made between raising expenditures and reducing tax rates.

Favors Tax Reduction to Increased Spending

I have long believed that it is ordinarily better to deal with a recession by reducing taxes than by increasing governmental spending. In the first place, increases of spending that are undertaken to correct a temporary setback of the economy tend to become permanent, or at least to outlast the reason that brought them into being. In the second place, and this is more vital in the present context, it usually takes considerable time before decisions to expand governmental spending become effective. A decision to carry out a broadly based tax reduction, on the other hand, is likely to stimulate private spending at once.

Need for Proper Timing

Reasonably good timing of fiscal contracyclical policies is essential to their success. I can illustrate what I mean by referring again to the recent recession. The main impact of the federal spending programs that were then inaugurated came after the recession was over. The cash deficit of $13 billion occurred in the fiscal year which ended last June — a year of continuous business expansion, not in the preceding fiscal year when the economy was depressed. This emergence of a huge deficit, at a time when the economy was advancing briskly, played its part in exciting expec-

tations of inflation and in causing skepticism about our finances abroad. It also brought on — fortunately in time — the restrictive fiscal and credit policies on which I have already commented.

I cannot leave the problem of choosing between tax reduction and increased spending without mentioning another reason for preferring the former at a time of recession. This reason gains special force from the state of our balance of payments. Investors—whether domestic or foreign—are always apt to frown on governmental deficits. It is not, however, a matter of indifference to them how the deficits come into being. If a deficit results from tax reduction — especially of the sort that is likely to stimulate private investment—the business and financial community, by and large, will have more confidence in governmental policies than if the deficit results from increases in expenditure. We cannot afford to overlook this consideration at a time when the confidence of foreign holders of dollars in the soundness of our financial policies is vital to our national prestige and to our political leadership of the Free World.

Improve Our Balance of Payments

Another thing that we of course need to do, if we are to be in a better position to deal with recessions, is to improve the state of our balance of payments. If we do that we will have greater freedom in shaping economic policies. And do this we must, since it is obvious that a deficit on international account of $3 to $4 billion a year, such as we had in 1958 and again in 1959, cannot long continue.

The easy way to solve this problem would be to cut sharply our military outlays abroad, handle likewise our military and economic aid programs, and make besides a few upward adjustments in tariffs. A solution along such lines would do us little harm if purely domestic conditions, whether economic or political, were our sole concern. We have to consider, however, also the state of world affairs. We surely cannot afford policies that would invite new Communist successes and make the precarious peace that we have still less secure.

We must therefore travel a harder road, but one that will enable us to discharge our responsibility and preserve our position in world affairs. The strong industrial nations of the Free World must be persistently urged to remove the remaining elements of discrimination against dollar trade. They must be urged to take over a larger portion of the common defense burden. And they must be urged to participate to a larger degree in providing development capital for the poorer nations whose peoples are stirring restlessly for economic improvement.

All this is as necessary as it is prudent and proper, but we must be realistic enough to recognize its limits. For some years, in all probability, we will have to continue rather large military expenditures abroad and besides provide, in one form or another, rather substantial economic assistance to the underdeveloped nations. This we can only do by enlarging our export surplus.

The government can help to expand exports. It can do this not only by persuading other nations to remove artificial barriers against our trade, but also by providing our exporters with fuller information about foreign conditions, by establishing overseas trade centers, by trade fairs, and by such devices as the newly announced program of guarantees of non-commercial risks for export credits. Whatever can be done through such means should, of course, be done.

The paramount fact remains, however, that exporting is a business like any other, and one that has recently become much more competitive. It is clearly to the interest of American producers to be alert and to become more alert to foreign needs, tastes, and marketing conditions, but that will not assure larger exports. To succeed in this, American producers must be able to control their costs so that they can price their wares competitively.

Of late, the currents of world trade have been changing swiftly. The nations of Western Europe and Japan, which were near collapse at the end of the war, have now rebuilt and greatly expanded their economies. Their industrial productivity is increasing more rapidly than ours. Their competitive power in world markets and even in our domestic market is growing. Moreover, not a few of them have learned to run their financial machinery so that their internal price level is substantially stable.

We have long been the mentors of the world in the proper conduct of finance. Now that others have learned the lesson well, we will need to practice it ourselves with increasing fidelity.

I thus come back to the need for governing our affairs so that the general level of prices may stay reasonably stable. What I have had to say about recessions has not been a digression. The proposal that we deal with the long-run problem of inflation by doing less to check recessions is neither practical nor wise. Not the least of its dangers is that if a serious depression again developed in our country, whether or not an inflationary spree had something to do with its onset, many years might need to elapse before any administration would summon the courage to pursue the austere policies that are at times needed to contain inflation.

How, then, should we conduct our affairs so as to limit the danger of long-range inflation? It will help, as I have tried to suggest, to develop sounder policies for coping with recessions. But we must try to be constructive on a much wider front.

Would Amend Employment Act

In my judgment, the most helpful single thing that could be done immediately would be to amend the Employment Act, so that reasonable stability of the consumer price level would be explicitly included among the objectives which it "is the continuing policy and responsibility of the Federal Government" to promote. Such a declaration of moral purpose by the Congress would go far in reassuring people, both here and abroad, that our government is keenly aware of the interests of the future as well as of the present.

Armed with such a resolution we will find it easier to cultivate the habit of leaning more heavily than we have in the past on fiscal policy to check excessive business exuberance. If we do that, strong monetary restraints will become less necessary or less often necessary. Let us not overlook the fact that when we enforce credit restraint and at the same time increase governmental spending, as we not infrequently have in the past, we tend to give a double twist to our economy in the direction of expanding the public sector. Governmental spending does this directly and credit restraint does it indirectly, since its main effect is to limit the growth of private rather than public enterprise.

We also need to be more energetic in using the powers of government to maintain and enhance the forces of competition. We have evolved over the years a vast patchwork of price supports, interest rate ceilings, wage regulations, trade union immunities, import duties, import quotas, stockpiles, and subsidies, which have tended either to raise costs and prices or to prevent them from falling. Some parts of this protective apparatus no doubt serve the public interest and will stand up well under careful examination. Other parts, however, of which the interest rate ceiling on long-term Treasury issues is only the most notorious, will stand no economic test that I know of.

What Kind of Economic Growth

The reforms of which I speak would not only help to check the creeping type of inflation from which our economy has long been suffering. They would also promote economic progress directly by enabling us to use our scarce resources more effectively.

Much has recently been said, and I think rightly said, about the desirability of increasing the rate at which our economy is growing. But so much emphasis has been put on doing this by increasing governmental spending that the issues of what might be a constructive debate have become clouded.

Apart from the critical question of how the government will obtain the additional funds, it surely must make some difference to our nation's rate of growth how the funds are used—whether they are spent, for example, on fancy school buildings or on better education for our children; or to cite another example, whether they are spent on lifting price supports, which are already a drag on the efficiency of agriculture, or on improving the mobility of goods and people within our large cities, where traffic congestion is reducing efficiency all around.

It surely must also make some difference to our nation's future rate of growth whether featherbedding practices, from which business managements are not entirely exempt, will continue with little change; whether the obsolete building codes of many of our cities will be retained; and whether the workweek in industry is further reduced.

Again, the rate of growth of our economy will depend on how rapidly the less efficient businesses can move closer to the practices of the more efficient firms. It will depend also on how clearly we perceive as a people the risk of continuing a tax structure that not only tends to inhibit enterprise and investment, but also diverts the energy of some of our ablest citizens into channels that may bring a tax advantage to them or their firms but do little or nothing to raise the nation's productivity.

Our economy today is the strongest in the world and our nation enjoys a higher standard of living than any other. We have a resilient economy. Not only has it the capacity to rebound energetically from occasional setbacks, but it has sufficient strength and momentum to keep growing despite many shortcomings of policy. In these revolutionary times, however, we must not appraise our economy or its rate of growth without considering also what is happening elsewhere.

I have already mentioned the great economic exuberance of Western Europe and Japan. Although this may cause us some temporary inconvenience, we may be confident that it will ultimately stimulate our economic growth as well as contribute to the economic progress and political stability of other nations of the Free World. The growth of Soviet economic power, on the other hand, can prove a seriously unsettling factor.

The Russian economy is not growing as rapidly as Soviet propaganda suggests, but it is growing more rapidly than ours. In time, as the Russian economy increases in size, its rate of growth will diminish appreciably. However, this may not happen soon enough to bring us comfort.

The stability of our vocabulary can mislead us. We keep speaking of capitalism, socialism, and communism, but the reality that these terms are intended to denote keeps changing. From what I can learn, the Russians have in recent years been very methodical in creating large income inequalities. In particular, they reward handsomely their managers, scientists, teachers, and the more skilled factory workers. But while they have been devising special incentives to spur productivity, thereby adopting the practices of our older capitalism, we have adopted a tax system that weakens the incentive to create and produce.

Can it be that the Russians have rediscovered one of the main secrets of Western economic success, while we have allowed our idealistic impulses to obscure the source of our own great achievements?

The question is one that every intelligent American should try to answer.

*An address by Dr. Burns before the School of Business Administration of the University of Southern California, Los Angeles, Calif., March 31, 1960.

Our Reporter on GOVERNMENTS

BY JOHN T. CHIPPENDALE, JR.

The sharp decline which has taken place in quotations of Government obligations should be self-arresting soon in the opinion of not a few money market specialists. It is believed that the modest liquidation and price depressing which has been going on in the more distant maturities of Treasury securities will be coming to an end because further price declines will bring certain of these issues, particularly the twenty-five year 4¼% bond, to levels that will attract some investment buying. There is no question but what the 1985 maturity is being watched very closely by those who are interested in the highest quality and income.

The demand for funds still continues to be sizeable even though there may not be that unusual need for money and credit which is typical of a boom period. Because the Treasury will have to confine refunding and new money operations to issues with a maturity of less than five years, this sector of the money market should continue highly competitive.

Impact of Investor Apathy to New 4¼s

The capital market is in the process of digesting the 4¼% bond due May 15, 1985/75, which the Treasury floated in order to raise a modicum of new money and at the same time to test the drawing power of a Government bond with such a coupon rate. The fact that investors could have bought as much as $1,500,000,000 of the bonds (non-callable for fifteen years) but went only for a token amount of this obligation had an adverse effect on the entire capital market. In addition, the unfavorable reception which was given to the first bond which the Treasury had offered in almost a year had an unsettling effect on the short-term market since yields on money market issues likewise went up.

It is evident that the pool of funds which is available for loans, near-term issues and bonds is not going to be invested at rates which do not meet the going market competition. In other words, it appears as though the trend of business is going to be good enough so that the demand for loans will continue to be sizeable and therefore short-term rates are not likely to move down to levels which will be too far out of line with the discount rate.

Also, the refunding of Government obligations will, in the opinion of most money market specialists, be confined exclusively to issues which mature in less than five years so that the short-term and intermediate-term areas of the market will have a substantial amount of securities. This probably means that the yield on near-term and middle-term issues will tend to move up to levels that will be in line with the return which is available in comparable merchandise such as loans.

No More Treasury 4¼s?

As far as the long-term sector of the bond market is concerned, it appears as though there is not going to be any competition in the foreseeable future from offerings of Treasury bonds. The interest rate level of 4¼% for obligations with a due date of more than five years is not going to attract funds for Government bonds in any size. This means that the capital market under existing conditions is going to be left pretty much to corporate and tax-exempt bond offerings. Because of the politics that are involved in the interest rate level for Government bonds, it is rather obvious that there is not going to be any change in the 4¼% level in spite of the fact that it is serving no useful purpose now and will not in the future as long as the demand for long-term funds is sizeable.

Therefore, it seems as if the long-term bond that was recently put out by the Treasury will have to find a level which is attractive to investors and this means that it will reach an area which will be competitive with non-federal obligations. The rest of the marketable bonds in the Treasury list will most likely continue to be moved about in the future as they have been in the past by the professional element in the bond market. There is not going to be any pick-up in the demand for Government bonds as long as the yields that are obtainable now in corporates and tax-exempts are around.

Firm Interest Rates Likely

The business pattern, in the opinion of money market specialists, is likely to follow a trend that will probably keep interest rates on the firm side. This means that there is not likely to be any changes in either the discount rate, the prime rate or margin requirements in the near future.

Mitchum, Jones to Admit Partner

LOS ANGELES, Calif.—Mitchum, Jones & Templeton, 650 South Spring Street, members of the New York and Pacific Coast Stock Exchanges, will admit Allen G. Mainland to partnership on May 1.

Lawrence to Be Walston V.-P.

On May 1st George B. Lawrence will become a vice president of Walston & Co., Inc., 74 Wall St., New York City, members of the New York Stock Exchange.

Lile Adds to Staff

PASADENA, Calif.—Kenneth H. Bays has been added to the staff of Lile & Co., Inc., 1001 East Green St.

STATE OF TRADE AND INDUSTRY

Continued from page 4

Already widely accepted for beer and motor oil packaging, the aluminum can will be test marketed as a frozen fruit juice container and cosmetic spray can. One estimate is that canmakers will use 50 million pounds of aluminum this year vs. 15 million in 1959.

This Week's Steel Output Based On 80.9% of Capacity

The American Iron and Steel Institute announced that the operating rate of the steel companies will average *143.5% of steel capacity for the week, beginning April 18, equivalent to 2,305,000 tons of ingot and steel castings (based on average weekly production of 1947-49). These figures compare with the actual levels of *138.5% and 2,225,000 in the week beginning April 11.

Actual output for last week beginning April 11, 1960 was equal to 78.1% of the utilization of the Jan. 1, 1960 annual capacity of 148,570,970 net tons. Estimated percentage for this week's forecast based on that capacity, is 80.9%.

A month ago the operating rate (based on 1947-49 weekly production) was *161.7% and production 2,597,000 tons. A year ago the actual weekly production was placed at 2,646,000 tons, or *164.7%.

*Index of production is based on average weekly production for 1947-49.

Auto Industry to Meet April Production Schedule

With manufacturing continuing to turn out passenger cars at the current daily rate of production, the U. S. auto industry should easily achieve its planned April schedule of 587,800 units.

"Ward's Automotive Reports" said daily car output through the week ended April 16 has averaged about 27,800 units for an estimated total of 305,700 or 52% of the month's schedule.

Included in the month's car production to date are an estimated 88,500 compact models — 29% of the industry total.

The reporting service said the daily rate of compact car output, currently about 8,100 units, would have to increase strongly in order to reach the April schedule of 185,600. If this figure is attained, "Ward's" said, the compacts will have accounted for a whopping 31% of the month's car output, highest rate in history and the greatest monthly turnout since January (173.334).

While the industry's planned April volume would be a decline of nearly 10% under last month, compact car production would be an increase of 9%, "Ward's" said.

"Ward's" added that despite plant shutdowns and shorter work schedules because of Good Friday observance, U. S. car output for this week is expected to increase about 7% over last week, which was the lowest output in 1960 to date.

Most assembly lines in the industry were idled for up to three hours on Good Friday because of the religious observance, and five Ford Division plants closed for the entire day.

Studebaker-Packard's South Bend, Ind., works halted production April 15th because of a reported schedule adjustment, and the Kansas City Chevrolet plant continued to be idled this week because of a strike at a supplier plant.

Chevrolet's Willow Run, Mich., Corvair plant operated only three days this week following a production cutback.

Electric Output 5.2% Above 1959 Week

The amount of electric energy distributed by the electric light and power industry for the week ended Saturday, April 16, was estimated at 13,263,000,000 kwh., according to the Edison Electric Institute. Output was 231,000,000 kwh. below that of the previous week's total of 13,494,000,000 kwh. but showed a gain of 654,000,000 kwh., or 5.2% above that of the comparable 1959 week.

Car Loadings for April 9th Week Were 3.4% Below 1959 Record

Loading of revenue freight for the week ended April 9, 1960, totaled 598,384 cars, the Association of American Railroads announced. This was a decrease of 20,884 cars or 3.4% below the corresponding week in 1959 but an increase of 77,224 cars or 14.8% above the corresponding week in 1958.

Loadings in the week of April 9, were 353 cars or one-tenth of 1% above the preceding week.

Lumber Shipments Down 8.8% From 1959 Week

Lumber shipments of 459 mills reporting to the National Lumber Trade Barometer were 11.2% below production during the week ended April 9, 1960. In the same week new orders of these mills were 1.1% below production. Unfilled orders of reporting mills amounted to 35% of gross stocks. For reporting softwood mills, unfilled orders were equivalent to 20 days' production at the current rate, and gross stocks were equivalent to 54 days' production.

For the year-to-date, shipments of reporting identical mills were 6.7% below production; new orders were 7.7% below production.

Compared with the previous week ended April 2, 1960, production of reporting mills was 2.3% above; shipments were 6.4% below; new orders were 0.7% below. Compared with the corresponding week in 1959, production of reporting mills was 2.2% above; *shipments were 8.8% below;* and new orders were 2.0% above.

Business Failures Dip in Easter Week

Commercial and industrial failures declined to 308 in the week ended April 14 from 333 in the preceding week, reported Dun & Bradstreet, Inc. While casualties were slightly higher than a year ago when 304 occurred, they remained moderately below the 346 in 1958 and were off 2% from the prewar level of 313 in the comparable week of 1939.

Failures involving liabilities of $5,000 or more fell to 267 from 292 in the previous week but exceeded the 256 of this size in the similar week last year. Small casualties, those with liabilities under $5,000, held steady at 41 and were less numerous than a year earlier when 48 were reported. Twenty-eight of the failing businesses had liabilities in excess of $100,000 as against 33 in the preceding week.

Wholesale Commodity Price Index Shows Slight Rise From Prior Week

Higher prices on flour, lard, hogs and steel scrap offset declines on sugar, butter, lambs, hides and rubber this week boosting the general commodity price level slightly above a week earlier. The Daily Wholesale Commodity Price Index, compiled by Dun & Bradstreet, Inc., stood at 275.30 (1930-32=100) on April 18, compared with 274.97 a week earlier and 277.88 on the corresponding date a year ago.

Most grain prices remained close to those of the prior week. A higher than previously expected forecast on the 1960 winter wheat crop discouraged domestic trading in wheat, but export volume moved up again. Wheat supplies in some markets were limited, and prices finished close to the prior week. There was a moderate rise in rye prices, reflecting steady demand and reductions in supplies in some areas.

Corn transactions picked up appreciably and stocks were relatively low; this helped corn prices match those of the preceding week. Although offerings were light, oats prices remained close to a week earlier and trading showed little change. A moderate decline in soybeans prices occurred as volume lagged.

Although volume in flour dipped a bit from the preceding week, prices finished slightly higher. While the call for rice for domestic use slipped somewhat at the end of the Lenten season, export purchases were sustained at high levels, with sizeable commitments made to Peru and India, rice prices were unchanged from a week earlier.

Trading in sugar was light during the week and prices were down slightly. Transactions in coffee were dull during the week, but prices were steady. There was a fractional decline in cocoa prices and trading was limited, reflecting the prospects for 1960 production substantially above probable consumption.

A slight rise occurred in hog prices this week and purchases were up somewhat on increased receipts in most markets. Prices on steers were steady and buying remained close to the preceding week. There was a slight decline in trading in lambs and prices finished moderately below a week earlier. Following the rise in hog prices, lard prices edged up during the week.

Prices on the New York Cotton Exchange moved within a narrow range last week and finished unchanged from a week earlier. There was a slight decline in trading during the week.

Wholesale Food Price Index Edges Up for Second Week In a Row

For the second time in a row, the wholesale food price index, compiled by Dun & Bradstreet, Inc., edged fractionally higher this week. On April 12 it stood at $5.95, compared with the week earlier $5.94, for an increase of 0.2%. It was down 3.4% from the $6.16 of the corresponding period a year ago.

Higher in wholesale price this week were flour, corn, rye, lard, butter, cottonseed oil, cocoa and eggs. Commodities quoted lower were beef, hams, coffee, raisins and lambs.

The index represents the sum total of the price per pound of 31 raw food stuffs and meat in general use. It is not a cost-of-living index. Its chief function is to show the general trend of food prices at the wholesale level.

Easter Retail Sales at High Level

Easter shopping moved up again this week, and over-all retail trade was sharply over the similar calendar week last year and moderately exceeded the comparable 1959 Palm Sunday week. On a calendar basis the most noticeable gains were in apparel, but volume in furniture and draperies was up moderately. There was another rise in sales of new passenger cars and purchases were appreciably higher than last year, according to scattered reports.

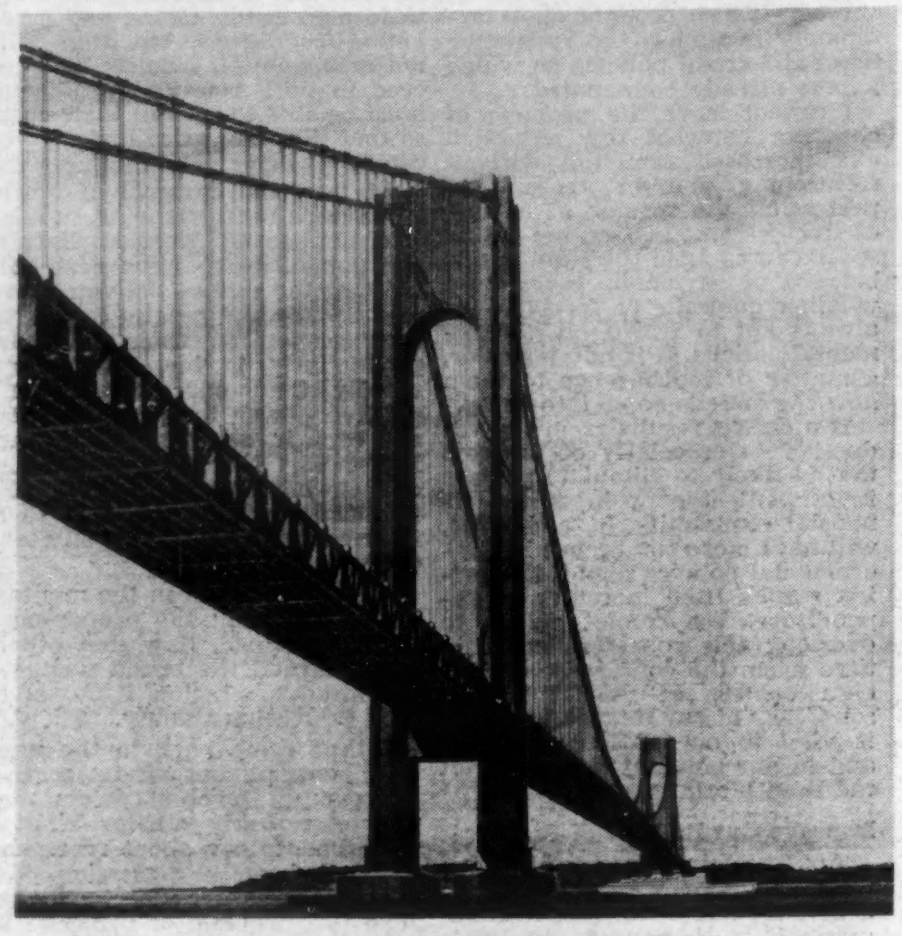
The total dollar volume of retail trade in the week ended April 13 was 13 to 17% higher than a year ago, according to spot estimates collected by Dun & Bradstreet, Inc. Regional estimates varied from the comparable 1959 levels by the following percentages: East North Central +19 to +23; South Atlantic +18 to +22; Middle Atlantic +15 to +19; West North Central +12 to +16; Pacific Coast +8 to +12; West South Central +7 to +11; New England and Mountain +6 to +10; East South Central +2 to +6.

Nationwide Department Store Sales Up 18% for April 9 Week

Department store sales on a country-wide basis as taken from the Federal Reserve Board's index for the week ended April 9, 1960, increased 18% above the like period last year. In the preceding week, for April 2, an increase of 22% was reported. For the four weeks ended April 9 a 6% increase was registered over the same period in 1958.

According to the Federal Reserve System department store sales in New York City for the week ended April 9 increased 20% over the like period last year. In the preceding week ended April 2, sales increased 29% over the like period last year. For four weeks ending April 9 a 9% increase was reported over the 1959 period, and from Jan. 1 to April 9 a 4% increase was recorded.

Verrazano-Narrows Bridge



Artist's Concept of the Verrazano-Narrows Bridge, which is being constructed by the Triborough Bridge and Tunnel Authority across the Narrows between the Boroughs of Brooklyn and Richmond (Staten Island). The bridge, which is scheduled to be opened to traffic by May 1965, is estimated to cost approximately $325,000,000. An issue of $100,000,000 of revenue bonds was sold April 19 to an underwriting group headed by Dillon, Read & Co. Inc.; White, Weld & Co.; W. H. Morton & Co. Inc., and Allen & Company.

York Co. Opens Branch

WALNUT CREEK, Calif. — York & Co. has opened a branch office at 1534 Bonanza Street under the direction of Grant F. Cotton.

Form Rainey - Kistle

STUART, Fla. — Rainey-Kistle, Inc. has been formed with offices at 611 Colorado Avenue to engage in a securities business. Officers are Claude O. Rainey, President; William L. Kistle, Vice-President and J. R. Smith, Secretary-Treasurer.

Joins Williston, Beane

(Special to THE FINANCIAL CHRONICLE)

CHICAGO, Ill.—Jarvis L. Goldsand has become associated with J. R. Williston & Beane, 208 South La Salle St. He was formerly with Westheimer & Co.

Join Thomas Jay Winston

BEVERLY HILLS, Calif. — Bernard Golub, Howard Toboco and Irwin I. Weisberg have become associated with Thomas Jay Winston & Co., Inc., 9235 Wilshire Blvd., members of the Pacific Coast Stock Exchange. Mr. Toboco was formerly with Keon & Co. Mr. Golub was with Marache, Dofflemyre & Co.

Dr. M. G. Lee Named By A. B. A.

Dr. Murray G. Lee, director of the Council on Banking Education of the American Bankers Association, has been appointed assistant director of The Stonier Graduate School of Banking, conducted by the ABA at Rutgers—The State University of New Jersey, it has been announced by Merle E. Selecman, ABA Executive Vice-President.

Dr. Lee will continue his responsibilities as director of the Council on Banking Education and as course administrator, in addition to being assistant director of the Graduate School.

Two With McCarley

(Special to THE FINANCIAL CHRONICLE)

ASHVILLE, N. C. — Andrew G. Elam and Donald T. Midyette have become associated with McCarley & Co., Inc., 35 Page Ave. Mr. Midyette formerly conducted his own investment business in New Bern, North Carolina.

Joins Hemphill, Noyes

(Special to THE FINANCIAL CHRONICLE)

LOS ANGELES, Calif. — Charles O. Doud has joined the staff of Hemphill, Noyes & Co., 628 West Sixth St. He was formerly with Lawson, Levy, Williams & Stern.

Joins Reynolds Staff

(Special to THE FINANCIAL CHRONICLE)

SAN FRANCISCO, Calif. — Kenneth D. Geissler has joined the staff of Reynolds & Co., 425 Montgomery St. In the past he was with Bacon & Co. and conducted his own business in San Francisco.

Now With Walston

(Special to THE FINANCIAL CHRONICLE)

DENVER, Colo.—Robert O. Woodwarth has become affiliated with Walston & Co., Inc., Denver U. S. National Center. He was formerly with Earl M. Scanlan & Co.

The Security I Like Best . . .

Continued from page 2

Its refinery yield was confined to about 30% asphalt, 20% low-grade gasoline, 10% fuel oil, and 40% other products.

As of Jan. 1, 1959, the company sold to over 1,000 retail service stations (101 supplied direct and 13 salary operated), and some 60% of the company's gasoline production is sold through these branded outlets. Refinery yields run 48% good quality gasoline, 30% fuel oil, 10% asphalt, and 12% other products. And KMG's refining setup, connecting three widely separated plants, which allows these three facilities to operate as one unit by means of an interplant pipeline, has been pointed out as a model for other refiners. The company is still a major supplier of asphalt, has a good position in the industrial naptha field, and in 1959 acquired a large Chicago fuel oil distributor, which is marketing a considerable proportion of its heating oil production.

The company also operates a small natural gas gathering system under contract mainly to one company, which doesn't appear to have any particular significance. In natural gasoline the growth phase seems to have been from 1953-55, when the greater portion of this growth was effected. Production has increased some 138%, mostly in the previously mentioned period of time.

Turning to uranium, we find that from an initial modest investment in 1952, Kerr-McGee has emerged as one of the major factors in this country who are producing uranium from nuclear energy, having invested $14.85 per share (consolidated—including $6.24 per share minority interest) since 1953. Through Kermac Nuclear Fuels (58% owned) the company owns or controls more than 25% of the known U. S. uranium reserves and was the first oil company to enter the uranium energy field. Minimum sales value, under already existing firm contracts, should be $174,000,000 (Kerr-McGee's net interest) while the maximum could be in excess of $203,000,000. The contracts, running to 1966, should generate approximately $25 per share in cash earnings with $13 per share being brought down to net after taxes ($1.85 per share in net earnings and $3.70 in cash earnings per year until 1966).

Recently, an older and smaller plant in Shiprock, N. Mexico, was reactivated to exploit a new process developed by Kerr-McGee for extracting vanadium out of uranium ore. Deliveries of both vanadium and uranium ore from this plant should commence in the near future.

In addition to its operations as an oil company and uranium-vanadium producer, the company has substantial helium reserves. These reserves could, in future years, have some significance. The reserves, located in Arizona, reputedly have the highest known helium content, percentagewise, of any known gas deposit. Kerr-McGee reportedly has been negotiating with the government whereby the latter would reopen a helium extraction plant in Shiprock, N. Mex., with the company building 135 miles of pipeline. The company says nothing of immediate significance is pending in spite of the short supply of helium. KMG also owns 25% of Farm Chemical Resources Development Company, mainly a potash venture. Because of the current oversupply situation in potash, this interest does not seem to hold any near-term significance.

In 1956 Kerr-McGee switched its research and development program's emphasis from the upgrading of asphaltic materials to the processing of minerals. The company maintains a small, but highly competent staff of scientists who are working in the mineral extraction field. In November of 1957 the company won an award for an improved uranium extraction method. In November of 1959 a new solvent extraction system that will recover high purity vanadium concentrate from the processed uranium ore was announced (simultaneously with the announcement of the renewal of the Shiprock uranium plant contract).

The company is continuing its research program aimed at development of other minerals important in future energy production. Among this group, boron, lithium and beryllium are included. Also, a less costly potash extraction method is being explored.

Moving into the financial aspects of KMG, the company seems to have followed a policy of concentrating its capital expenditures ($56.59 per share from 1953 to 1959, including $6.25 per share minority interest) on various phases of its organization in particular years rather than heavily committing itself to one segment for a great number of years. This policy has resulted in an overall growth of the company's resources rather than in one particular division.

To illustrate, as a percentage of its total capital expenditure in specific years its drilling and marine expenditures ran as follows—1954, 19.33%; 1956, 31.94%; 1957, 41.57%; 1959, 5.53%, while in oil and gas production 19.62% was spent in 1959 and 43.68% in 1957. Nineteen fifty-nine expenditures for uranium ran 52.48% of the total, while estimated 1960 expenditures should run approximately 10.19%. As with most oil companies, KMG has been a deficit spender (in relation to cash flow) with 1960 producing the first surplus since 1952. The balance of the money spent has been raised through common stock sales, stock options exercised, sale of bonds with warrants attached, and also a convertible preferred issue. (These warrants, options and convertible preferreds represent a possible dilution factor of some 17%. The company states that it has no plans for additional equity financing.)

This aggressive expansion program has resulted in a heavy debt structure even for the oil industry, which has a large number of leveraged companies. Interest payments of approximately $3,000,000 in 1959 were equal to over 50% of after-tax income. As a percentage of balance sheet capitalization, debt runs to 47%, and as a percentage of market value (including the common at a price of $50), it runs to 34%.

Insofar as earnings and dividends are concerned, the company's investments in uranium and natural gas have placed it in a position where product price fluctuations in the oil industry will not make the company's earnings vulnerable. These two sources alone should give Kerr-McGee an earnings base of well over $2.00 per share, while contract drilling should continue to be a reasonably consistent earnings' producer. For 1960 earnings of $3.25 to $3.50 appear to be a minimum figure with over $4.00 earnings a distinct possibility for 1961. Cash earnings of $10.00 per share, up from $7.79 in 1959, again appear to me minimal.

While net earnings have fluctuated — $1.64 in 1956, $2.29 in 1957, $1.93 in 1958, and $2.13 in 1959, cash earnings have more than tripled since 1955. In that year the company had cash earnings of $2.73, in 1958—$6.28, and $10.00 is estimated by the writer for 1960.

The company has followed a conservative dividend policy with payout averaging 43% of net earnings per common share since 1953. Because of heavy capital expenditures and the substantial increase in debt, this policy will, in most likelihood, continue. However, a $0.20 extra (on top of its $0.80 annual dividend) was recently declared and paid. A stock dividend or more permanent type cash dividend increase is probable for fiscal 1961.

Some final figures on the price of the stock as related to earnings. The stock is currently selling at around 50 and at 15.5 times 1960 estimated net earnings. Its 1953-59 average P/E is 33.3. On the cash earnings side of the picture these same shares sold, during the same period, at an average of 11.0 times cash earnings. Again, at around 50, it is selling on a 6.4 times cash earnings basis.

Listed on the NYSE, over 17% of the approximately 2.4 million shares are owned by Senator R. S. Kerr and his wife and 6% by Dean A. McGee, and another 15 to 20% reportedly is held by other officers, directors and employees. In addition, some 325,000 shares are owned by investment trusts.

Form Briggs Hawkins

MEMPHIS, Tenn.—Briggs, Hawkins & Shannon has been formed with offices in the Columbian Mutual Tower to engage in a securities business. Partners are Raymond M. Briggs, Albert V. Shannon and Ernest M. Hawkins.

E. M. Greene Opens

DETROIT, Mich. — Eugene M. Greene is engaging in a securities business from offices in the Book Tower under the firm name of E. M. Greene & Co. Mr. Greene was previously with Ashton & Co.

Francis G. Heavey Opens

(Special to THE FINANCIAL CHRONICLE)

NORTH HOLLYWOOD, Calif. — Francis G. Heavey is conducting a securities business from offices at 6342 Coldwater Canyon Ave. He was previously with Leonard B. Schneider.

With A. J. Taranto

(Special to THE FINANCIAL CHRONICLE)

CARMICHAEL, Calif. — Gerald W. Swanston is now connected with A. J. Taranto & Co. 6609 Stanley Ave. He was formerly with Richard A. Harrison, Inc.

Three With Hayden, Stone

(Special to THE FINANCIAL CHRONICLE)

LOS ANGELES, Calif.—Henry A. Boulanger, Henry D. Lombardo and Walter MacIndoe are now connected with Hayden, Stone & Co., 5657 Wilshire Blvd.

Joins Keon Staff

(Special to THE FINANCIAL CHRONICLE)

LOS ANGELES, Calif. — Leo D. Bartelme, Jr. has joined the staff of Keon & Co., 639 South Spring St. He was formerly with Lloyd Arnold & Co.

Hannaford & Talbot Adds

(Special to THE FINANCIAL CHRONICLE)

SAN FRANCISCO, Calif.—Eric P. Alvord has been added to the staff of Hannaford & Talbot, 519 California Street, members of the Pacific Coast Stock Exchange.

Named Director

Alfredo Philipp, Vice-President of the New York investment firm of A. W. Benkert & Co., Inc., has been elected to the board of directors of the New York, Susquehanna and Western Railroad Company.

Mr. Philipp was also elected a member of the carrier's executive committee. He has been associated with A. W. Benkert & Co., Inc. for 18 years.

All State Properties

FLORAL PARK, N. Y.—All-State Properties, Inc. is engaging in a securities business from offices at 30 Verbena Avenue.

Investment Dealers Ass'n of Canada Forty-Fourth Annual Meeting in June

TORONTO, Canada—The Forty-Fourth Annual Meeting of The Investment Dealers' Association of Canada will be held at the Manoir Richelieu, Murray Bay, Quebec, from Thursday, June 16 to Sunday, June 19, inclusive, 1960.

This meeting is for the purpose of receiving reports from the Association's Officers, for the discussion of any business that may be brought before the Meeting and for the election of Officers.

ANNUAL MEETING

THE MANOIR RICHELIEU, MURRAY BAY, QUEBEC

Thursday, June 16-Sunday, June 19, 1960

GENERAL

The programme for the Annual Meeting is being arranged so that business sessions for the Members will be held in the mornings.

Ladies will be welcome to attend all sessions. There will be no special programme arranged for them since there are a variety of recreational facilities at the Hotel.

RESERVATIONS

It has been arranged with Canada Steamship Lines that all reservations, both in regard to boat accommodation and accommodation at the Manoir Richelieu, must be made through H. L. Gassard, at the head office of the Investment Dealers Association, 55 Yonge Street, Toronto. Members will be advised by the Association's head office of their Hotel suite or room numbers and cabin numbers well in advance of the Meeting. There will be a registration desk on the boat at which Members will register for their hotel rooms prior to the boat's arrival at Murray Bay.

The Association's head office in Toronto will also make reservations on the going railway trip upon request in writing giving all necessary details regarding place, date and time of departure and type of reservations desired. Members should note that the Association's office is not arranging return railway reservations and Members should make their own arrangements for return reservations at an early date.

The Members of the outgoing and incoming National Executive Committees are requested to make arrangements to arrive at Murray Bay on Wednesday, June 15. The S.S. "Tadoussac" will leave Montreal at 6:45 p.m., standard time, on Tuesday, June 14. Meetings of this Committee will be held prior to the Annual Meeting.

PROGRAMME

A tentative programme follows. All times shown are standard.

Wednesday, June 15:

2:30 p.m.—Meeting of the Members of the outgoing and incoming National Executive Committees in Card Room A.

Thursday, June 16:

9:30 a.m.—Meeting of the Members of the outgoing and incoming National Executive Committees.

12:30 noon—Arrival of Members.

6:00 p.m.-7:30 p.m.—President's Reception, Mr. and Mrs. N. J. Alexander, for Members, their wives and guests in the Lounge. (Black Tie)

9:30 p.m.-12:30 a.m.—Dancing in the Casino.

Friday, June 17:

9:30 a.m.—*Forum*—"Municipal Finance" in the Rose Room. Chairman—To be announced.

10:40 a.m.—*Annual Meeting* of all the Members in the Casino. Welcome by His Excellency Onesime Gagnon, Lieutenant-Governor of the Province of Quebec.
Guest of Honor and Principal Speaker—Mr. Henry Clay Alexander, Chairman of the Board, Morgan Guaranty Trust Company of New York.

12:00 noon-1:00 p.m. (Approximately)—Cocktails in the Lounge.

2:00 p.m.—Golf Tournament.
Scenic Tours—Baie St. Paul via river road and return by mountain road. Round trip 50 miles. Time 2¾ hours. Baie St. Paul is an artist's paradise.
or
St. Simeon via Cap-a-l'Aigle. Round trip via River and mountain road 60 miles. Time 2 hours. St. Simeon is the north shore terminus of the ferry to Riviere-du-Loup. 1½-hour crossing, three times a day, provides a St. Lawrence boat trip.

6:00 p.m.-7:30 p.m.—Cocktail party in the Lounge.

9:30 p.m.-12:30 a.m.—Dancing in the Casino.

Saturday, June 18:

9:30 a.m.—*Forum*—"Portfolio Management" in the Rose Room. Chairman—To be announced.

10:40 a.m.—*Annual Meeting* of all the Members in the Casino. Guest of Honor and Principal Speaker—Mr. J. W. Kerr, President, Trans-Canada Pipe Lines Limited, Toronto. Election of Officers.

12:00 noon-1:00 p.m. (Approximately)—Cocktails in the Lounge.

2:00 p.m.—Golf Tournament.
Visit to Donohue Bros. pulp and newsprint mill at Clermont, 10 miles from Murray Bay. Tour will commence at 3:00 p.m. with refreshments at 4:30 p.m.

6:00 p.m.-7:30 p.m.—Reception by the incoming President for Members, their wives and guests in the Lounge. (Black Tie) Presentation of golf prizes.

9:30 p.m.-12:30 a.m.—Dancing in the Casino.

Sunda,y June 19:

9:30 a.m.—Meeting of the Members of the incoming National Executive Committee in Card Room A.

10:00 a.m.—Members must have their luggage labeled and ready for delivery to the steamer.

2:25 p.m.—Departure for Montreal.

Securities Now in Registration

★ INDICATES ADDITIONS SINCE PREVIOUS ISSUE
• ITEMS REVISED

• Aero Industries, Inc. (5/2-6)
March 11 filed 250,000 shares of common stock (par 25 cents). **Price** — $3.30 per share. **Proceeds** — For new equipment, expansion of the business, and general corporate purposes. **Office**—Pottstown, Pa. **Underwriter**—Myron A. Lomasney & Co. of New York City.

Agricultural Research Development, Inc. (5/2-6)
Jan. 25 filed 200,000 shares of common stock (par 10 cents). **Price**—$5 per share. **Proceeds**—To purchase land, to construct buildings, and provide necessary equipment and capital to engage in a hog raising enterprise. **Office**—Wiggins, Colo. **Underwriter**—W. Edward Tague Co., Pittsburgh, Pa. **Note**—This statement is being revised.

All-State Properties, Inc. (5/2-6)
March 17 filed 870,132 shares of capital stock, to be offered for subscription by holders of outstanding shares of such stock. **Price**—To be supplied by amendment. **Proceeds**—To reduce current indebtedness and for future operations. **Office**—Floral Park, L. I., N. Y. **Underwriters**—Bear, Stearns & Co. and Allen & Co., both of New York City.

Alterman-Big Apple, Inc. (5/2-6)
March 18 filed 403,310 shares of common stock (par $2.50), of wihch 60,000 shares are to be offered for public sale on behalf of the issuing company. Of the remaining 343,310 shares (all outstanding), 168,310 are to be offered by Bankers Securities Corp. and 175,000 by certain other individuals. **Price**—$18 per share. **Proceeds**—To repay indebtedness, for working capital and other corporate purposes. **Office**—933 Lee St., S. W., Atlanta, Ga. **Underwriter**—Van Alstyne, Noel & Co., New York.

★ American Bowla-Bowla Corp.
April 15 filed 100,000 shares of common stock and warrants for the purchase of an additional 50,000 shares, The company proposes to offer these securities for public sale in units consisting of two shares of stock and one warrant. **Price**—$6.25 per unit. **Proceeds**—To cover an initial installment on the purchase price of two bowling centers; for furniture and fixtures thereon; and the balance to be added to working capital and be available for general corporate purposes. **Office**—400 38th St., Union City, N. J. **Underwriter**—Hill, Thompson & Co., Inc., New York.

American Bowling Enterprises, Inc. (5/2-6)
Feb. 25 filed 100,000 shares of common stock (par $1), and 100,000 class A purchase warrants, to be offered in units of one warrant with each share. The class A warrants give the right to purchase the stock at $7.50 per share for the first six months, at $8.50 per share from the seventh to the 24th month, and at $9 per share from the 25th to the 30th month. **Price**—$7.50 per unit. **Proceeds**—For the construction of new bowling centers. **Office** — Rochester, N. Y. **Underwriter** — Myron A. Lomasney & Co., New York City.

★ American Capital Life Iusurance Co.
April 15 filed 96,450 shares of class "A" common capital stock. **Price**—$5.80 per share **Proceeds**—For general corporate purposes. **Office**—917 15th St., N. W., Washington, D. C. **Underwriter**—None.

American Convalescent Foundation, Inc.
March 31 (letter of notification) 60,000 shares of common stock. **Price**—At par ($5 per share). **Proceeds**—To pay the balance on new land, retirement of short-term bank loans, payment for additional equipment and furnishings and for working capital. **Office**—3267 Southeast Hawthorne Boulevard, Portland, Ore. **Underwriter**—Jerry A. Barfoot, Portland, Ore.

American Frontier Life Insurance Co. (5/2-6)
Nov. 30 filed 200,000 shares of capital stock. **Price**—$8 per share. **Proceeds** — To increase capital and surplus. **Office**—1455 Union Ave., Memphis, Tenn. **Underwriter**—Union Securities Investment Co., also of Memphis, which will receive a selling commission of $1.20 per share.

★ American International Aluminum Corp. (5/23-27)
April 13 filed 400,000 shares of common stock. **Price**—To be supplied by amendment. **Proceeds**—For general corporate purposes and working capital. **Office**—4851 N.W. 36th Ave., Miami, Fla. **Underwriters**—Hardy & Co. and Filor, Bullard & Smyth, both of New York.

American Security Corp. (5/2-6)
March 28 filed 100,000 shares of capital stock (par $2). The company is an affiliate of American Security & Trust Co. by reason of the fact that each of their stockholders owns the same number of outstanding shares of each entity. It is proposed to offer the 100,000 shares of American Security stock and a like number of shares of the $10 par capital stock of the Trust Company in units of one share of stock of each issuer; and the units are to be offered for subscription by stockholders of each issuer at the rate of one new share for each five shares held. **Price**—To be supplied by amendment. **Proceeds**—American Security will use its proceeds in part to repay current indebtedness incurred incident to the purchase of the non-banking assets of The City Bank of Washington, with the balance added to working capital for general corporate purposes. **Office**—734 15th Street, N. W., Washington, D. C. **Underwriters**—Alex Brown & Sons, Baltimore, Md.; Folger, Nolan, Fleming-W. B. Hibbs & Co., Inc. and Johnston Lemon & Co., Washington, D. C.; and Kidder, Peabody & Co., New York.

American Stereophonic Corp. (5/16-20)
April 11 (letter of notification) 50,000 shares of common stock (par one cent). **Price**—$2 per share. **Proceeds**—

Continued on page 37

NEW ISSUE CALENDAR

April 22 (Friday)

Forest Hills Country Club Ltd.----------Common
(Jerome Robbins & Co.) $300,000
Menu-Matics, Inc.----------Common
(Pleasant Securities Co.) $285,000
Metropolitan Broadcasting Corp.----------Debentures
(Kuhn, Loeb & Co. and Carl M. Loeb, Rhoades & Co.) $6,000,000
Rap-In-Wax Co.----------Common
(Dean Witter & Co.) 107,290 shares

April 25 (Monday)

American Telemail Service, Inc.----------Common
(Edgar B. Hunt Co.) $1,500,000
Aviation Employees Corp.----------Common
(G. J. Mitchell Jr. Co. and Ralph B. Leonard & Sons, Inc.) $5,000,000
Avis, Inc.----------Common
(W. E. Hutton & Co.) 20,000 shares
Avis, Inc.----------Debentures
(W. E. Hutton & Co.) $5,000,000
Baltimore Paint & Chemical Corp.----------Preferred
(P. W. Brooks & Co.) $1,800,000
Baltimore Paint & Chemical Corp.----------Bonds
(P. W. Brooks & Co.) $750,000
Baltimore Paint & Chemical Corp.----------Debentures
(P. W. Brooks & Co.) $750,000
Certified Credit & Thrift Corp.----------Class B
(Commonwealth Securities Corp.) 250,000 shares
Certified Credit & Thrift Corp.----------Class A
(Commonwealth Securities Corp.) 250,000 shares
Circuitronics, Inc.----------Common
(Lloyd, Miller & Co.) $300,000
Crawford Corp.----------Common
(A. G. Becker & Co., Inc.) 200,000 shares
Custom Craft Marine Co., Inc.----------Common
(R. A. Holman & Co., Inc.) $255,000
Deltown Foods, Inc.----------Common
(A. G. Becker & Co., Inc.) 115,000 shares
Deluxe Aluminum Products, Inc.----------Common
(R. A. Holman & Co., Inc.) $350,000
Deluxe Aluminum Products, Inc.----------Debentures
(R. A. Holman & Co., Inc.) $330,000
General Casting Corp.----------Common
(Bertner Bros. and Earl Edden Co.) $300,000
Glass Magic Boats, Inc.----------Common
(R. A. Holman & Co., Inc.) 68,000 shares
Glass Magic Boats, Inc.----------Debentures
(R. A. Holman & Co., Inc.) $51,000
Henry's Drive-In, Inc.----------Common
(Westheimer & Co.) $250,000
Lawn Electronics Co., Inc.----------Common
(Prudential Securities Corp.) $105,000
Melville Shoe Corp.----------Debentures
(Merrill Lynch, Pierce, Fenner & Smith, Inc.) $12,000,000
Monarch Tile Manufacturing, Inc.----------Common
(Rauscher, Pierce & Co., Inc.) 58,337 shares
NAFI Corp.----------Capital
(Shields & Co.) 200,000 shares
New Jersey Natural Gas Co.----------Debentures
(Offering to stockholders—underwritten by Allen & Co.) $3,830,000
Pacemaker Boat Trailer Co., Inc.----------Common
(Jacey Securities Co. and First City Securities, Inc.) $300,000
Premier Industrial Corp.----------Common
(A. G. Becker & Co., Inc.) 212,500 shares
Renner, Inc.----------Common
(Stroud & Co., Inc.) $300,000
Seaboard Plywood & Lumber Corp.----------Debentures
(Peter Morgan & Co.) $300,000
Seaboard Plywood & Lumber Corp.----------Common
(Peter Morgan & Co.) 30,000 shares
Service Instrument Corp.----------Common
(Pearson, Murphy & Co., Inc.) $300,000
Spring Street Capital Co.----------Common
(William R. Staats & Co.) 3,000 shares
Teletray Electronic Systems, Inc.----------Common
(A. T. Brod & Co.) $450,000
Tenax, Inc.----------Common
(Myron A. Lomasney) $600,000
Thermal Industries of Florida, Inc.----------Common
(Peter Morgan & Co.) $720,000
Universal Fabricators, Inc.----------Common
(James Co.) $500,000
Vulcatron Corp.----------Common
(P. de Rensis & Co., Inc.) $300,000
Wells Industries Corp.----------Common
(A. T. Brod & Co.) 300,000 shares
Whitmoyer Laboratories, Inc.----------Common
(Hallowell, Sulzberger, Jenks, Kirkland & Co.) $510,000
Whitmoyer Laboratories, Inc.----------Debentures
(Hallowell, Sulzberger, Jenks, Kirkland & Co.) $500,000
Wolverine Shoe & Tanning Corp.----------Common
(A. G. Becker & Co., Inc.) 100,000 shares

April 26 (Tuesday)

Metal Goods Corp.----------Common
(G. H. Walker & Co.) 100,000 shares
Metropolitan Edison Co.----------Bonds
(Bids 11 a.m. EST) $15,000,000
Mills Factors Corp.----------Common
(Lee Higginson Corp. and C. E. Unterberg, Towbin Co.) $2,293,060

April 27 (Wednesday)

Howe Plastics & Chemical Companies, Inc.----Com.
(Hilton Securities, Inc.) $180,000
Microdot Inc.----------Capital
(White, Weld & Co.) 204,000 shares
Straza Industries----------Capital
(J. A. Hogle & Co.) 230,000 shares

April 28 (Thursday)

Cincinnati Gas & Electric Co.----------Bonds
(Bids 11:00 a.m. EST) $30,000,000
Dynex, Inc.----------Common
(Myron A. Lomasney & Co.) 54,000 shares
Greater Washington Industrial Investments, Inc.----------Common
(Johnston, Lemon & Co. and Auchincloss, Parker & Redpath) $3,000,000
Holt, Rinehart & Winston, Inc.----------Common
(Goldman, Sachs & Co.; Allen & Co. and Shearson, Hammill & Co.) 331,740 shares
Union Financial Corp.----------Common
(White, Weld & Co.; The Ohio Co. and Sanders & Co.) 325,000 shares

April 29 (Friday)

Applied Electronics Corp. of N. J.----------Class A
(S. D. Fuller & Co.) 200,000 shares
Weldotron Corp.----------Common
(Arnold Malkan & Co., Inc. and Street & Co., Inc.) $199,998

May 2 (Monday)

Aero Industries, Inc.----------Common
(Myron A. Lomasney & Co.) $825,000
Agricultural Research Development, Inc.----Common
(W. Edward Tague Co.) $1,000,000
All-State Properties, Inc.----------Capital
(Offering to stockholders—underwritten by Bear, Stearns & Co. and Allen & Co.) 870,132 shares
Alterman-Big Apple, Inc.----------Common
(Van Alstyne, Noel & Co.) $7,259,580
American Bowling Enterprises, Inc.----------Common
(Myron A. Lomasney & Co.) 100,000 shares
American Bowling Enterprises, Inc.----------Warrants
(Myron A. Lomasney & Co.) 100,000 warrants
American Frontier Life Insurance Co.----------Capital
(Union Securities Investment Co.) $1,600,000
American Security Corp.----------Capital
(Alex Brown & Sons; Folger, Nolan, Fleming-W. B. Hibbs & Co., Inc.; Johnston, Lemon & Co. and Kidder, Peabody & Co.) 100,000 shares
Audion-Emenee Corp.----------Common
(Pistell, Schroeder & Co., Inc. and Bertner Bros.) 100,000 shares
Big Laurel, Inc.----------Common
(Pearson, Murphy & Co., Inc. and Mackay & Co.) 400,000 shares
Big Laurel, Inc.----------Preferred
(Pearson, Murphy & Co., Inc. and Mackay & Co.) 400,000 shares
Cabana Pools, Inc.----------Common
(Mandell & Kahn, Inc.) $300,000
Dalto Corp.----------Common
(No underwriting) 134,739 shares
Dubois Chemicals, Inc.----------Common
(Allen & Co.) 200,000 shares
Farrington Manufacturing Co.----------Debentures
(Cyrus J. Lawrence & Sons and Brawley, Cathers & Co.) $6,000,000
Florida Builders, Inc.----------Common
(Jaffee & Co.) 80,000 shares
Founders Mutual Depositor Corp.----------Common
(Hecker & Co.) $292,500
Friendly Frost Inc.----------Common
(No underwriting) $1,125,000
Hampshire Gardens Associates----------Units
(B. C. Morton & Co., Inc.) $376,000
Hawley Products Co.----------Common
(Dean Witter & Co.) 90,000 shares
Hydra-Power Corp.----------Debentures
(Aetna Securities Corp. and D. Gleich Co.) $600,000
Keystone Electronics Co., Inc.----------Common
(J. A. Winston & Co., Inc. and Netherlands Securities, Inc.) $600,000
Loveless Properties, Inc.----------Common
(Andersen, Randolph & Co., Inc.) $300,000
Magnin (Joseph) Co., Inc.----------Debentures
(F. S. Smithers & Co.) $1,250,000
Magnin (Joseph) Co., Inc.----------Common
(F. S. Smithers & Co.) 78,000 shares
Majestic Specialties, Inc.----------Common
(Hayden, Stone & Co.) 150,000 shares
Marquette Corp.----------Common
(Carl M. Loeb, Rhoades & Co. and Piper, Jaffray & Hopwood) 461,431 shares
Nalley's, Inc.----------Debentures
(Dean Witter & Co.) $1,000,000
Newark Electronics Corp.----------Common
(H. M. Byllesby & Co., Inc.) 200,000 shares
Ott Chemical Co.----------Debentures
(Offering to stockholders—underwritten by H. M. Byllesby & Co., Inc.) $450,000
Pacific Panel Co.----------Common
(Frank Karasik & Co., Inc.) $450,000
Pacific Vegetable Oil Corp.----------Debentures
(Dean Witter & Co. and Hooker & Fay, Inc.) $2,500,000
Precision Circuits, Inc.----------Common
(Myron A. Lomasney & Co.) 37,500 shares
Precision Circuits, Inc.----------Debentures
(Myron A. Lomasney & Co.) $250,000
Pyramid Mouldings, Inc.----------Common
(A. C. Allyn & Co., Inc. and Shillinglaw, Bolger & Co.) $1,738,000
Radiant Lamp Corp.----------Class A
(Amos Treat & Co., Inc.) $600,000
Raymond Corp.----------Common
(George D. B. Bonbright & Co.) $300,000
Ritter Finance Co., Inc.----------Debentures
(Stroud & Co., Inc.) $1,500,000
Schaevitz Engineering----------Common
(Woodcock, Moyer, Fricke & French, Inc.) $300,000
Smilen Food Stores, Inc.----------Common
(Federman, Stonehill & Co.) 200,000 shares
Southern Nevada Telephone Co.----------Preferred
(Dean Witter & Co.) 100,000 shares
Spartans Industries, Inc.----------Common
(Shearson, Hammill & Co. and J. C. Bradford & Co.) 120,000 shares
Superior Electric Co.----------Common
(Lee Higginson Corp.) 150,000 shares
Teleregister Corp.----------Debentures
(Ladenburg, Thalmann & Co., Bear, Stearns & Co. and Sutro Bros.) $6,000,000
Teleregister Corp.----------Common
(Ladenburg, Thalmann & Co., Bear, Stearns & Co. and Sutro Bros.) 240,000 shares
Uranium Reduction Co.----------Common
(A. C. Allyn & Co., Inc.) 200,000 shares
Uris Buildings Corp.----------Debentures
(Kuhn, Loeb & Co.) $20,000,000
Uris Buildings Corp.----------Common
(Kuhn, Loeb & Co.) 400,000 shares

May 3 (Tuesday)

Columbia Gas System, Inc.______________Common
(Bids 3:45 p.m. EDST) 1,400,000 shares

Dial Finance Co.______________________Common
(White, Weld & Co., Inc.) 300,000 shares

New Jersey Aluminum Extrusion Co, Inc.__Capital
(Laird & Co. Corp.) 110,000 shares

May 4 (Wednesday)

Chicago, Milwaukee, St. Paul & Pacific RR.______Equip. Trust Ctfs.
(Bids 1 p.m. EDT) $4,650,000

Mays (J. W.), Inc._____________________Common
(Merrill Lynch, Pierce, Fenner & Smith, Inc.) 317,500 shares

May 5 (Thursday)

General Shale Products Corp.____________Common
(Equitable Securities Corp.) 220,605 shares

May 6 (Friday)

Maryland Credit Finance Corp.___________Common
(Alex Brown & Sons) 28,250 shares

May 9 (Monday)

Automation Systems, Inc._______________Common
(B. Fennekohl & Co., Inc.) $150,000

Dworman Corp. _______________________Common
(Charles Plohn & Co.) $3,000,000

Dynamic Films, Inc.____________________Common
(Morris Cohon & Co.) $300,000

Electrada Corp. _______________________Common
(Bache & Co.) 400,000 shares

Englehard Industries, Inc.______________Common
(Dillon, Read & Co., Inc. and Lazard Freres & Co.) 400,000 shares

Ets-Hokin & Galvan, Inc.________________Common
(Van Alstyne, Noel & Co.) $1,325,000

Federal Steel Corp.____________________Common
(Westheimer & Co.) $295,000

Figurette, Ltd. ________________________Common
(Myron A. Lomasney & Co.) $600,000

First National Realty & Construction Corp.___Pfd.
(H. Hentz & Co.) 150,000 shares

First National Realty & Construction Corp.__Com.
(H. Hentz & Co.) 150,000 shares

First National Realty & Construction Corp.__War.
(H. Hentz & Co.) 150,000

Forest City Enterprises, Inc.____________Common
(Bache & Co.) 450,000 shares

FXR, Inc. _________________________Debentures
(C. E. Unterberg, Towbin Co.) $2,000,000

Gem International, Inc.________________Common
(Bosworth, Sullivan & Co., Inc. and Scherck, Richter Co.) 150,000 shares

Growth Capital, Inc.___________________Common
(McDonald & Co. and Paine, Webber, Jackson & Curtis) $10,000,000

Ionics, Inc. __________________________Common
(Lee Higginson Corp.; Shields & Co. and C. E. Unterberg, Towbin Co.) 75,000 shares

Litecraft Industries, Ltd.______________Debentures
(P. W. Brooks & Co.) $750,000

National Lawn Service Corp.____________Common
(Fund Planning Inc.) $300,000

OK Rubber Welders, Inc.________________Common
(Bosworth, Sullivan & Co., Inc.) 50,000 shares

Otarion Listener Corp.__________________Common
(D. A. Lomasney & Co.) $567,000

Pennsylvania Electric Co.________________Bonds
(Bids 12 noon EDST) $12,000,000

Rajac Self-Service, Inc.________________Common
(Walter R. Blaha & Co., Inc.) $300,000

Squan Marina, Inc._____________________Common
(B. Fennekohl & Co.) $300,000

Telectro Industries Corp.____________Debentures
(Milton D. Blauner & Co., Inc.) $1,000,000

United States Boat Corp.________________Common
(Richard Bruce & Co., Inc.) $700,000

Vector Manufacturing Co., Inc.___________Common
(Paine, Webber, Jackson & Curtis) 250,000 shares

Yale Express System, Inc._______________Class A
(Michael G. Kletz & Co., Inc.) $1,650,000

Zero Manufacturing Co.________________Common
(Shields & Co.) 200,000 shares

May 10 (Tuesday)

Chemical Packaging Co., Inc.____________Common
(Mainland Securities Corp. and Jeffrey-Robert Corp.) $287,500

General American Transportation Corp. Equip. Trust Ctfs.
(Kuhn, Loeb & Co.) $30,000,000

Goelet Corp. _____________________Debentures
(Ross, Lyon & Co., Inc. and Globus, Inc.) $700,000

Goelet Corp. _________________________Common
(Ross, Lyon & Co., Inc. and Globus, Inc.) 70,000 shares

Goelet Corp. _________________________Warrants
(Ross, Lyon & Co., Inc. and Globus, Inc.) 35,000

National Packaging Corp._______________Common
(No underwriting) $360,000

Nuclear Research Chemicals, Inc.________Common
(Security Associates, Inc.; George, O'Neill & Co., Inc. and Roman & Johnson) $200,000

Wisconsin Telephone Co._____________Debentures
(Bids 11:00 a.m. DST) $20,000,000

May 12 (Thursday)

California Electric Power Co.______________Bonds
(Bids 9 a.m. PST) $12,000,000

May 13 (Friday)

Moore-McCormack Lines, Inc._______________Bonds
(Kuhn, Loeb & Co. and Lehman Brothers) $10,000,000

May 16 (Monday)

American Stereophonic Corp._____________Common
(D. H. Victor & Co., Inc.) $100,000

Bevis Shell Homes, Inc.________________Debentures
(Bell & Hough, Inc. and G. H. Walker & Co.) $1,600,000

Bevis Shell Homes, Inc.________________Common
(Bell & Hough, Inc. and G. H. Walker & Co.) 1,000,000 shares

Brush Beryllium Co.____________________Common
(Kuhn, Loeb & Co. and McDonald & Co.) 410,206 shares

Dymo Industries, Inc.___________________Capital
(William R. Staats & Co.) 150,000 shares

Electronic Assistance Corp.______________Common
(Amos Treat & Co., Inc.) 152,698 shares

Great American Realty Corp.__________Debentures
(Louis L. Rogers Co. and Hilton Securities, Inc.) $2,000,000

Great American Realty Corp.______________Class A
(No underwriting) 110,000 shares

Gulf-Tex Development, Inc.______________Common
(Myron A. Lomasney & Co.) $1,250,000

Hamilton Management Corp.______________Common
(Kidder, Peabody & Co.) 320,000 shares

I C Inc. ______________________________Common
(Purvis & Co. and Amos C. Sudler & Co.) $1,500,000

Kenrich Petrochemicals, Inc.____________Common
(First Philadelphia Corp.) $192,500

Kenrich Petrochemicals, Inc.__________Debentures
(First Philadelphia Corp.) $175,000

Lite-Vent Industries, Inc.________________Common
(Peter Morgan & Co.) $520,000

Medallion Pictures Corp._______________Debentures
(Hancock Securities Corp.) $300,000

Missile Electronics, Inc._________________Common
(Pleasant Securities Co.) $643,500

Mister Service, Inc._____________________Common
(Jacey Securities Co.) $160,000

Pendleton Tool Industries, Inc.____________Common
(Kidder, Peabody & Co. and McDonald & Co.) 50,000 shares

Simmonds Precision Products, Inc._______Common
(Shearson, Hammill & Co.) 112,500 shares

Sire Plan of Normandy Isle, Inc.______Debentures
(Sire Plan Portfolios, Inc.) $225,000

Sire Plan of Normandy Isle, Inc.________Preferred
(Sire Plan Portfolios, Inc.) 4,500 shares

Telecomputing Corp. ____________________Common
(Dean Witter & Co.) 100,000 shares

Trans Tech Systems, Inc._________________Common
(Myron A. Lomasney & Co.) $650,000

United Components, Inc.__________________Common
(Darius, Inc.) 110,000 shares

United Financial Corp. of California___Debentures
(Lehman Brothers) $6,000,000

United Financial Corp. of California________Capital
(Lehman Brothers) 120,000 shares

Viewlex, Inc. _________________________Class A
(Stanley Heller & Co.) $800,000

May 17 (Tuesday)

Milwaukee Gas Light Co.____________________Bonds
(Bids 11 a.m. EDT) $22,000,000

May 18 (Wednesday)

General Atronics Corp.__________________Common
(Harrison & Co.) $544,810

May 19 (Thursday)

Harburton Financial Corp.________________Common
(Simmons, Rubin & Co., Inc.) $298,500

May 23 (Monday)

American International Aluminum Corp._Common
(Hardy & Co. and Filor, Bullard & Smyth) 400,000 shares

Anken Chemical & Film Corp.____________Common
(Offering to stockholders—underwritten by R. W. Pressprich & Co. and Riter & Co.) 145,703 shares

General Aeromation, Inc.________________Common
(Westheimer & Co.) $253,350

Hudson Vitamin Products, Inc.____________Common
(Bear, Stearns & Co.) 212,500 shares

Miller & Van Winkle Co.__________________Class A
(Whitmore, Bruce & Co.) $225,000

Obear-Nester Glass Co.__________________Common
(Merrill Lynch, Pierce, Fenner & Smith, Inc.) 210,045 shares

Piper Aircraft Corp._____________________Common
(The First Boston Corp.) 100,000 shares

Security Industrial Loan Association__Debentures
(Lee Higginson Corp.) $500,000

Security Industrial Loan Association____Common
(Lee Higginson Corp.) 50,000 shares

Sierra Electric Corp.____________________Common
(Marron, Sloss & Co., Inc.) $900,000

May 24 (Tuesday)

Food Fair Stores, Inc.____________________Common
(Eastman Dillon, Union Securities & Co. and A. M. Kidder & Co.) 168,833 shares

Jersey Central Power & Light Co.___________Bonds
(Bids 11:00 a.m. N. Y. time) $7,000,000

May 25 (Wednesday)

Esquire Radio & Electronics, Inc.________Common
(Myron A. Lomasney Co.) $750,000

May 27 (Friday)

North Central Co.________________________Common
(No underwriting) 420,945 shares

May 31 (Tuesday)

Continental Capital Corp.__________________Capital
(McDonnell & Co.) $3,290,000

Futterman Corp. _________________________Class A
(Reynolds & Co.) 660,000 shares

Mattel, Inc. ____________________________Common
(Bache & Co.) 300,000 shares

Patrick County Canning Co., Inc.__________Common
(G. Everett Parks & Co., Inc.) $420,000

Reeves Broadcasting & Development Corp.___Com.
(Laird & Co. Corp.) $2,336,960

Swimming Pool Development Co., Inc.___Common
(Marron, Sloss & Co., Inc.) $1,250,000

Wallace Properties, Inc.__________________Common
(Harriman Ripley & Co., Inc.) 360,000 shares

Wallace Properties, Inc.________________Debentures
(Harriman Ripley & Co., Inc.) $12,000,000

Waltham Precision Instrument Co., Inc.__Common
(Offering to stockholders—underwritten by Schweickart & Co.) 700,000 shares

June 2 (Thursday)

Southern Electric Generating Co.____________Bonds
(Bids to be invited) $40,000,000

June 7 (Tuesday)

Northwestern Bell Telephone Co._____Debentures
(Bids to be invited) $45,000,000

Washington Gas Light Co.__________________Bonds
(Bids 11:30 a.m. EDT) $12,000,000

July 7 (Thursday)

Gulf Power Co.____________________________Preferred
(Bids to be invited) $5,000,000

Gulf Power Co.____________________________Bonds
(Bids to be invited) $5,000,000

July 13 (Wednesday)

Northern Illinois Gas Co.____________________Bonds
(Bids to be invited) $25,000,000

June 14 (Tuesday)

Consolidated Edison Co. of New York______Bonds
(Bids to be received) $50,000,000

June 20 (Monday)

Gulf States Utilities Co.______________________Bonds
(Bids to be invited) $17,000,000

July 19 (Tuesday)

New Jersey Power & Light Co._______________Bonds
(Bids to be invited) $6,000,000

August 9 (Tuesday)

Southwestern Bell Telephone Co.______Debentures
(Bids to be invited) $100,000,000

September 13 (Tuesday)

Virginia Electric & Power Co.________________Bonds
(Bids to be invited) $25,000,000

September 27 (Tuesday)

Indianapolis Power & Light Co.______________Bonds
(Bids to be invited) $12,000,000

November 3 (Thursday)

Georgia Power Co.___________________________Bonds
(Bids to be invited) $12,000,000

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For general corporate purposes. **Office**—17 W. 60th St., New York, N. Y. **Underwriter**—D. H. Victor & Co., Inc., New York, N. Y.

● American Telemail Service, Inc. (4/25-29)
Dec. 8 filed 375,000 shares of common stock. **Price**—$4.00 per share. **Proceeds**—For establishing airmail facilities at airports. **Office**—518 Felt Bldg., Salt Lake City, Utah. **Underwriter**—Edgar B. Hunt Co., New York City.

● Anken Chemical & Film Corp. (5/23)
April 7 filed 145,703 shares of common stock (par 20 cents), to be offered for subscription by holders of outstanding common stock at the rate of one new share for each six shares held. **Price**—To be supplied by amendment. **Proceeds**—$1,950,000 will be applied toward the purchase of certain properties and assets of the Sperry Rand Corp.; $140,000 will be used to retire short-term bank loans; and the balance for general corporate purposes. **Office**—1 Hicks Ave., Newton, N. J. **Underwriters**—R. W. Pressprich & Co. and Riter & Co., both of New York.

● Applied Electronics Corp. of N. J. (4/29)
March 11 filed 200,000 shares of class A stock (par 10 cents). **Price**—To be supplied by amendment. **Proceeds**—$45,000 is to be used for the purchase of stock of Diversified Industries Corp.; $33,000 for repayment of indebtedness owing to management officials; $150,000 for the establishment of laboratory and sales facilities in Dallas and sales and service facilities in Los Angeles; $200,000 for research and development; and the balance for working capital. **Office**—22 Center St., Metuchen, N. J. **Underwriter**—S. D. Fuller & Co., New York.

Audion-Emenee Corp. (5/2-6)
March 29 filed 100,000 shares of common stock (par $1). **Price**—To be supplied by amendment. **Proceeds** — For working capital. **Office**—New York City. **Underwriters**—Pistell, Schroeder & Co., Inc., and Bertner Bros., both of New York City.

● Automation Systems, Inc. (5/9-13)
Feb. 12 (letter of notification) 150,000 shares of common stock (par 25 cents). **Price**—$1 per share. **Proceeds**—For general corporate purposes. **Office**—150-34 12th Avenue, Whitestone 57, N. Y. **Underwriter**—B. Fennekohl & Co., Inc., New York, N. Y.

Aviation Employees Corp. (4/25-29)
Feb. 8 filed 2,500,000 shares of common stock. **Price**—$2 per share. **Proceeds**—Together with other funds, will be invested in the shares of the company's three subsidiaries; for general corporate purposes; and the remaining balance will be used from time to time for the purchase of all or a substantial interest in or the formation of one or more other companies engaged in the business of insurance or finance or to further supplement the funds of the three subsidiaries. **Office**—930 Tower Bldg., Washington, D. C. **Underwriters**—G. J. Mitchell Jr. Co., Washington, D. C.; and Ralph B. Leonard & Sons, Inc., of New York City.

● Avis, Inc. (4/25-29)
March 1 filed $5,000,000 of subordinated convertible debentures, due April 1, 1970, and 200,000 shares of common stock (par $5). **Price**—To be supplied by amendment. **Proceeds** — The company anticipates that a portion will be used for advances to or investments in one or more of its subsidiaries for their general business purposes. In addition the company may also apply a portion of the proceeds to the acquisition of additional businesses and to the prepayment of part of its outstanding long-term debt and to the temporary reduction of outstanding borrowings under a 6% revolving credit loan. **Office**—18 Irvington Street, Boston, Mass. **Underwriter**—W. E. Hutton & Co., New York.

● Baltimore Paint & Chemical Corp. (4/25-29)
Jan. 22 filed (a) $750,000 of sinking fund debentures, 6½ series, due 1975 with eight-year warrants for the purchase of 22,500 common shares at the rate of 30

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shares for each $1,000 of debentures; (b) 90,000 shares of 6½% cumulative convertible first preferred stock (par $20) and (c) $750,000 of 6¼% first mortgage bonds, due 1972, sold to New York Life Insurance Co., along with 12-year warrants granted said insurance company to purchase 15,000 shares of the issuer's common at a price to be specified. **Price**—For the debentures, at par; for the preferred, $20 per share. **Proceeds**—For general corporate purposes including repayment of loan, purchase of land, construction, purchase of machinery and equipment, and for working capital. **Office**—2325 Annapolis Avenue, Baltimore, Md. **Underwriter**—P. W. Brooks & Co., New York City.

Bevis Shell Homes, Inc. (5/16)
March 30 filed $1,600,000 of 9% subordinated sinking fund debentures due 1985 and 1,000,000 shares of common stock, to be offered for public sale in units (200,000), at $15.50 per unit, each unit to consist of five common shares, one $8 par debenture, and warrants for the purchase of two additional units of one common share and one $8 debenture at $9.50 per unit. **Proceeds**—$2,000,000 will be used to increase the company's holdings of mortgages placed on the shell homes it sells; and $1,600,000 to be used to increase its holding of mortgages will be placed in escrow for that purpose; and the balance for general corporate purposes. **Office**—Tampa, Fla. **Underwriters**—G. H. Walker & Co., New York City and Beil & Hough, Inc. of St. Petersburg, Fla., as comanagers.

Big Laurel, Inc. (5/2-6)
March 22 filed 400,000 shares of 7% cumulative preferred stock (par $2.80) and 400,000 shares of common stock (par 10 cents), to be offered in units of one share of preferred and one share of common. **Price**—$3 per unit. **Proceeds**—To develop a resort community and for working capital. **Office**—Bryson City, N. C. **Underwriters**—Pearson, Murphy & Co., Inc., New York City, and Mackay & Co., Reading Pa.

Birtcher Corp.
March 29 filed $500,000 of 6% convertible subordinated debentures, due April 30, 1975. **Price**—At par. **Proceeds**—To pay bank loans incurred to augment working capital. **Office** — Los Angeles, Calif. **Underwriter** — Quincy Cass Associates, Los Angeles, Calif.

Bowers Battery & Spark Plug Co.
March 29 filed 280,000 shares of common stock (no par), of which 250,000 shares will be offered for public sale at $6 per share and 30,000 shares will be offered to selected employees at $5.40 per share. **Proceeds** — Between $200,000 and $300,000 is expected to be expended before 1961 for starting up costs, including initial rents of the new plant in the southeastern portion of the United States which it hopes to obtain and open before the end of the year; an additional $250,000 is expected to be expended either by the company or through its subsidiaries for the improvement of certain of its manufacturing facilities, such as additional mechanization and material control handling and for experimental work in connection with beryllium; and the balance of the proceeds will be added to the company's general funds. **Office**—Reading, Pa. **Underwriter** — Dempsey-Tegeler & Co., St. Louis and New York. **Offering** — Expected in early May.

Brush Beryllium Co. (5/16-20)
April 11 filed 410,206 shares of common stock, of which 260,000 shares are to be offered for the account of the issuing company and 150,206 shares, representing outstanding stock, are to be offered for the account of the present holders thereof. **Price** — To be supplied by amendment. **Proceeds** — For expansion. **Office**—Cleveland, Ohio. **Underwriters**—Kuhn, Loeb & Co., New York City, and McDonald & Co., Cleveland.

Cabana Pools, Inc. (5/2-6)
March 31 (letter of notification) 150,000 shares of common stock (par 10 cents). **Price**—$2 per share. **Proceeds** — For general corporate purposes. **Office** — 640 Fifth Avenue, New York, N. Y. **Underwriter** — Mandell & Kahn, Inc., Time-Life Building, Rockefeller Center, New York, N. Y.

California Electric Power Co. (5/12)
April 5 filed $12,000,000 of first mortgage bonds, series due May 1, 1990. **Proceeds**—To discharge short-term bank loans of some $9,500,000 and for the company's construction program. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc.; Kidder, Peabody & Co.; White, Weld & Co. **Bids**—Expected to be received up to 9 a.m. (PST) on Thursday, May 12, in the offices of O'Melveny & Myers, Room 900, 433 South Spring Street, Los Angeles 13, Calif.

● Capital Airlines, Inc.
Jan. 26 filed 909,659 shares of common stock on the basis of one additional share for each share held, with rights to expire 14 days after offering date. **Proceeds** — To broaden equity base. **Office** — Washington National Airport, Washington 1, D. C. **Underwriters** — Lehman Brothers and Smith, Barney & Co., New York, N. Y. **Note**—This statement has been withdrawn.

★ Caterpillar Tractor Co.
April 18 filed 175,000 shares of common stock, to be offered pursuant to the company's Employees Investment Plan. **Office**—600 W. Washington Street, East Peoria, Illinois.

● Certified Credit & Thrift Corp. (4/25-29)
Jan. 26 filed 250,000 shares of class A stock ($10 par) and 250,000 shares of class B stock (20c par), to be offered in units of one share of each class of stock. **Price**—$20.20 per unit. **Proceeds**—To pay mortgages. **Office**—Columbus, Ohio. **Underwriter**—Commonwealth Securities Corp., Columbus.

● Charlotte Motor Speedway, Inc.
Jan 21 filed 304,280 shares of common stock (par $1), being offered to common stockholders of record Feb. 15 at the rate of 2 new shares for each 3 shares then held with rights to expire on April 27. **Price**—$2 per share, initially; after 15 days from the offering date of April 12, the underwriter will offer unsubscribed shares to purchasing stockholders for an additional 10 days, after which such shares may be publicly offered. **Proceeds**—For construction of a speedway and its accessories. The issuer expects to stage its first stock car race in May **Office**—108 Liberty Life Building, Charlotte, N. C. **Underwriter**—Morrison & Co. Charlotte.

Chemical Packaging Co., Inc. (5/10)
March 16 (letter of notification) 115,000 shares of common stock (par 10 cents). **Price**—$2.50 per share. **Proceeds** — For general corporate purposes. **Office** — 755 Utica Avenue, Brooklyn, N. Y. **Underwriters**—Mainland Securities Corp., 156 N. Franklin Street, Hempstead, N. Y. and Jeffrey-Robert Corp., 382 S. Oyster Bay Road, Hicksville, L. I., N. Y.

★ Chemtree Corp.
April 19 (letter of notification) 262,750 shares of common stock (par 10 cents). **Price**—$1 per share. **Proceeds**—For general corporate purposes. **Office**—100 W. 10th Street, Wilmington 99, Del. **Underwriter**—Havener Securities Corp., New York, N. Y.

Cincinnati Gas & Electric Co. (4/28)
March 22 filed $30,000,000 of first mortgage bonds due May 1, 1990. **Proceeds**—To be used to finance a portion of the company's construction program, to repay $4,000,000 of bank notes, and for other corporate purposes. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co., Inc.; Morgan Stanley & Co. and W. E. Hutton & Co. (jointly); Blyth & Co., Inc. and The First Boston Corp. (jointly); Merrill Lynch, Pierce, Fenner & Smith Inc. and Lehman Brothers (jointly); Eastman Dillon, Union Securities & Co. and White, Weld & Co. (jointly). **Bids**—Expected to be received on April 28, up to 11:00 a.m. (EST) at the Irving Trust Co., One Wall Street, New York City.

● Circuitronics, Inc. (4/25-29)
Feb. 9 (letter of notification) 75,000 shares of class A common stock (par one cent). **Price**—$4 per share. **Proceeds**—For general corporate purposes. **Office**—121 Varick Street, New York, N. Y. **Underwriter**—Lloyd, Miller & Co., 2605 Connecticut Avenue, N. W., Washington, D. C.

★ Coca-Cola Bottling Co. of New York, Inc.
April 19 filed 298,204 outstanding shares of its common stock. **Price**—To be supplied by amendment. **Proceeds**—To selling stockholders. **Underwriter**—Eastman Dillon, Union Securities & Co., New York. **Listing**—The company intends to apply for NYSE listing.

● Cold Lake Pipe Line Co., Inc.
Feb. 5 filed 200,000 shares of common stock. **Price**—At the market, at time of offering. **Proceeds**—For general corporate purposes. **Office**—1410 Stanley St., Montreal, Canada. **Underwriter**—Michael Fieldman, New York.

★ Colorado Caterers, Inc.
April 8 (letter of notification) 150,000 shares of common stock (no par). **Price** — $2 per share. **Proceeds** — For working capital. **Office**—7626 Old Georgetown Road, Bethesda, Md. **Underwriter**—E. A. Burka, Inc., Washington, D. C.

Columbia Gas System, Inc. (5/3)
March 25 filed 1,400,000 shares of common stock (par $10). **Proceeds**—Together with other available funds, including funds generated from operations during 1960 and funds to be obtained from additional financing in 1960, will be used to satisfy the demands in 1960 upon such general funds, including particularly the 1960 construction program of Columbia Gas subsidiaries. **Underwriters**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co., Inc.; Merrill Lynch, Pierce, Fenner & Smith Inc. and White, Weld & Co. (jointly); Morgan Stanley & Co., Lehman Brothers, Eastman Dillon, Union Securities & Co. and Goldman, Sachs & Co. (jointly). **Bids**—To be received on May 3 up to 3:45 p.m. New York Time. **Information**—On April 28 and 29, by appointment at the company's office, 120 East 42nd Street, New York.

Consolidated Realty Investment Corp.
March 11 filed 2,000,000 shares of common stock. **Price**—$1 per share. **Proceeds**—Of the proceeds, $1,226,500 will be used for the acquisition of properties, $300,000 as a reserve for development expense, and the balance for working capital and other corporate purposes. **Office**—1321 Lincoln Ave., Little Rock, Ark. **Underwriter**—The Huntley Corp.

Constellation Life Insurance Co.
March 29 filed 1,350,000 shares of common stock, of which 350,000 shares will be reserved for stock options, 150,000 shares will be offered to holders of the outstanding common on a "first-come-first-served" basis at $3.25 per share, and 850,000 shares will be publicly offered. **Price**—$3.50 per share. **Proceeds**—To general funds. **Office** — Norfolk, Va. **Underwriter** — Willis, Kenny & Ayres, Inc., Richmond, Va.

★ Continental Capital Corp. (5/31-6/3)
April 19 filed 235,000 shares of capital stock. **Price**—$14 per share. **Proceeds**—For investment in small business concerns, and to the extent necessary may use a portion thereof to retire its outstanding subordinated debenture in the amount of $150,000 held by the Small Business Administration. **Office** — 120 Montgomery Street, San Francisco, Calif. **Underwriter** — McDonnell & Co., Inc., New York.

Continental Electric Co.
Feb. 11 filed 260,000 shares of common stock (par $1). **Price**—To be supplied by amendment. **Proceeds**—To retire outstanding bank loans, for expansion and development of new products, and for working capital. **Office**—715 Hamilton St., Geneva, Ill. **Underwriter**—Old Colony Investment Co., Stoneham, Mass.

Cosmopolitan Insurance Co.
March 30 (letter of notification) 58,000 shares of capital stock (Par $1). **Price** — $5 per share. **Proceeds** — For general corporate purposes. **Office**—4620 N. Sheridan Road, Chicago, Ill. **Underwriter**—Link, Gorman, Peck & Co., Chicago, Ill.

● Cosnat Record Distributing Corp.
Feb. 29 (letter of notification) 75,000 shares of class A common stock (par 10 cents). **Price**—$4 per share. **Proceeds**—For general corporate purposes. **Office**—315 W. 47th Street, New York, N. Y. **Underwriter**—Mortimer B. Burnside & Co., Inc., New York, N. Y. **Offering**—Expected sometime in May.

Crawford Corp. (4/25-29)
March 28 filed 200,000 shares of common stock (par $1), of which 100,000 shares are to be offered for public sale for account of issuing company and the balance, being outstanding stock, by the present holders thereof. **Price**—To be supplied by amendment. **Proceeds**—To be initially added to working capital and used for general corporate purposes, including but not limited to the reduction of short-term bank loans ($5,921,872 outstanding at Dec. 31, 1959, including $5,199,800 of bank loans made directly to an unconsolidated subsidiary). It is contemplated that the additional funds will be used to acquire land for development or resale to dealers, construction loans to builder-dealers, expansion of the company's market area, and the possible manufacture and erection, in cooperation with builders, of "shell" house packages for completion by the home owner on a "do-it-yourself" basis. **Office**—7111 Florida Boulevard, Baton Rouge, La. **Underwriter**—A. G. Becker & Co., Inc., of Chicago and New York.

Custom Craft Marine Co., Inc. (4/25-29)
March 28 (letter of notification) 85,000 shares of common stock (par 25 cents). **Price**—$3 per share. **Proceeds**—For general corporate purposes. **Office**—1700 Niagara Street, Buffalo, N. Y. **Underwriter**—R. A. Holman & Co., Inc., New York, N. Y.

● Dade Metal Fabrications, Inc. (4/18-22)
March 22 (letter of notification) 200,000 shares of common stock (par 10 cents). **Price**—$1 per share. **Proceeds**—To purchase land and erect a plant, additional tools, machinery and equipment, and for other working materials. **Office**—4798 Tenth Lane, Hialeah, Fla. **Underwriter**—R. A. Holman & Co., Inc., New York, N. Y. **Offering**—Imminent.

Daito Corp. (5/2)
March 29 filed 134,739 shares of common stock, to be offered for subscription by holders of such stock of record May 2 at the rate of one new share for each two shares then held with rights to expire on June 3. **Price**—To be supplied by amendment. **Proceeds**—For the retirement of notes and additional working capital **Office**—Norwood, N. J. **Underwriter**—None.

Dart Drug Corp.
March 30 filed 200,000 shares of class A common stock, of which 170,000 shares are to be offered for public sale on behalf of the issuing company and 30,000 shares, being outstanding stock, on behalf of the present holders thereof. **Price**—$5 per share. **Proceeds**—For repayment of corporate indebtedness and for working capital. **Office**—5458 Third St., N. E., Washington, D. C. **Underwriter**—Hodgdon & Co., Washington, D. C.

Deltown Foods, Inc. (4/25-29)
March 22 filed 115,000 shares of outstanding common stock (par $1). **Price**—To be supplied by amendment. **Proceeds** — To selling stockholders. **Office**—Yonkers, N. Y. **Underwriter**—A. G. Becker & Co., Inc., New York City.

Deluxe Aluminum Products, Inc. (4/25-29)
Oct. 15 filed $330,000 of convertible debentures, and 70,000 shares of common stock. **Price**—For the debentures, 100% of principal amount; for the stock, $5 per share. **Proceeds**—From 10,000 shares of the common stock, to the present holders thereof; from the rest of the offering, to the company to be used for expansion and as working capital. **Office**—6810 S. W. 81st St., Miami, Fla. **Underwriter**— R. A. Holman & Co., Inc.

★ Deuterium Corp.
April 12 (letter of notification) 30,000 shares of 5% prior preferred stock (non cumulative, redeemable, convertible). **Price**—At par ($10 per share). **Proceeds**—For general corporate purposes. **Office**—Suite 2606, 295 Madison Avenue, New York 17, N. Y. **Underwriter**—None.

Development Credit Corp. of Maryland
March 29 filed 2,000,000 shares of common stock. **Price**—$1.10 per share. **Proceeds** — For general corporate purposes. **Underwriter**—None.

Dial Finance Co. (5/3)
March 25 filed 300,000 shares of common stock (no par), including 150,000 shares which are outstanding and will be offered for public sale by the holders thereof, and the remaining 150,000 will be offered for the company's account. **Price**—To be supplied by amendment. **Proceeds**—To be added to the company's general funds and will be used initially to reduce short term debt. **Office**—207 Ninth St., Des Moines, Iowa, **Underwriter**—White, Weld & Co., Inc., New York.

Dobson Brothers Construction Co.
March 30 (letter of notification) $300,000 of subordinated equipment notes to be offered in denominations of $1,000 each. **Price**—At par. **Proceeds**—For construction equipment; to retire equipment obligations, and for working capital. **Office**—502 First National Bank Bldg., Lincoln, Neb. **Underwriter**—First Trust Co. of Lincoln, Lincoln, Neb.

Dubois Chemicals, Inc. (5/2-6)
March 30 filed 200,000 shares of common stock (par $1) to be publicly offered and 125,000 shares issuable under the company's Restricted Stock Option Incentive Plan for key employees. **Price**—To be supplied by amendment. **Proceeds**—To reduce a bank loan in the amount of $2,-681,000. **Office**—634 Broadway, Cincinnati, O. **Underwriter**—Allen & Co., New York.

Durox of Minnesota, Inc.
April 11 filed $650,000 of 7% first mortgage bonds and 120,000 shares of common stock. The offering will be made in units of one bond ($100 principal amount) and 20 shares of common stock or one unit of 50 bonds at principal amount plus accrued interest. **Price**—To be supplied by amendment. **Proceeds**—For additional plant and equipment and to provide working capital to commence and maintain production. **Office** — 414 Pioneer Bldg., St. Paul, Minn. **Underwriters**—Irving J. Rice & Co., Inc., St. Paul, Minn. and M. H. Bishop & Co., Minneapolis, Minn.

Dworman Corp. (5/9-13)
Jan. 15 filed 300,000 shares of common stock. **Price**—$10 per share. **Proceeds**—For general corporate purposes. **Office**—400 Park Avenue, New York City. **Underwriter**—Charles Plohn & Co., New York City.

● Dymo Industries, Inc. (5/16-20)
April 11 filed 150,000 shares of capital stock (par $1). **Price**—To be supplied by amendment. **Proceeds**—Approximately $200,000 of the proceeds from the sale of the stock will be used for the purchase and installation of machinery and equipment in a new plant which the company is presently negotiating to lease; $400,000 will be used for the acquisition of tools, dies, jigs and fixtures; $100,000 for leasehold improvements; and the balance for working capital. **Office**—2546 Tenth St., Berkeley, Calif. **Underwriter** — William R. Staats & Co., Los Angeles, California.

Dynamic Films, Inc. (5/9-13)
March 29 (letter of notification) 100,000 shares of common stock (par 10 cents). **Price**—$3 per share. **Proceeds**—For general corporate purposes. **Office** — 405 Park Avenue, New York, N. Y. **Underwriter**—Morris Cohon & Co., New York, N. Y.

Dynex, Inc. (4/28)
March 15 filed 54,000 common shares (25 cents par) and warrants for an additional 5,000 shares of this stock. The company proposes to make a public offering of 30,000 shares. Of the additional 24,000 shares, 20,000 are being issued in escrow for the account of, and may be resold by, the holders of capital stock and certain creditors of Matronics, Inc., after July 22, 1960 at the then prevailing market price; and 4,000 shares for the account of the holders of the common stock and a creditor of Optics Manufacturing Corp. The 5,000 warrants are being issued to stockholders and certain creditors of Matronics, Inc. **Price**—To be supplied by amendment. **Proceeds**—To finance the activities of the two newly-acquired concerns, to finance the starting of inventories and advertising incident to new products, to purchase additional equipment and inventory for the manufacture and production of contracts for other concerns, and to expand the scope of the company's business. **Office**—123 Eileen Way, Syosset, N. Y. **Underwriter**—Myron A. Lomasney & Co., New York.

E. H. P. Corp.
Aug. 31 filed 160,000 shares of capital stock (par 10c), of which 100,000 shares are to be publicly offered. **Price**—$2.50 per share. **Proceeds** — To provide funds for the purchase of vending machines which will be used to distribute automobile breakdown insurance policies on thruways, parkways and highways in the amount of $25 of such breakdown insurance for the purchase price of 25 cents, and for a public relations and publicity program. **Office**—Hotel Troy Building, Troy, New York. **Underwriter**—John R. Boland & Co., Inc., New York.

East Alabama Express, Inc.
April 1 (letter of notification) 77,000 shares of common stock (par $1). **Price**—$2.50 per share. **Proceeds**—To repay notes payable, reduce equipment purchase obligations, accounts payable and for working capital. **Office**—109 M Street, Anniston, Ala. **Underwriter**—First Investment Savings Corp., Birmingham, Ala.

● Edwards Engineering Corp.
April 8 filed 85,000 shares of common stock of which 70,000 shares are to be offered for the account of the issuing company and 15,000 shares, representing outstanding stock, are to be offered for the account of the present holders thereof. **Price**—$3.50 per share. **Proceeds**—For general corporate purposes including salaries, sales promotion, moving expenses, and research and development work. **Office**—715 Camp Street, New Orleans, La. **Underwriter**—Sandkuhl & Company, Inc., New York City and Newark, N. J.

● Electrada Corp. (5/9-13)
March 29 filed 400,000 shares of common stock. **Price**—To be supplied by amendment. **Proceeds**—For acquisitions, debt reduction, and other corporate purposes. **Office**—9744 Wilshire Blvd., Beverly Hills, Calif. **Underwriter**—Bache & Co., New York.

Electronic Assistance Corp. (5/16-20)
March 17 filed 122,500 shares of common stock (par 10 cents), of which 72,500 shares are to be offered for public sale for the account of the company and the remaining 50,000 shares, now outstanding, by Robert Edwards, company president. **Price**—To be supplied by amendment. **Proceeds**—$20,000 will be used to further equip its engineering department and office, $60,000 for research and development, and $20,000 for advertising and promotion. The balance of the proceeds of approximately $594,750 will be added to working capital. **Office**—20 Bridge Ave., Red Bank, N. J. **Underwriter**—Amos Treat & Co., Inc., New York.

Englehard Industries, Inc. (5/9-13)
Mar. 30 filed 400,000 shares common stock (par $1). **Price**—To be supplied by amendment. **Proceeds**—$2,000,000 to reduce outstanding amount of term notes, and the balance to reduce outstanding short-term indebtedness and increase working capital. **Office**—Newark, N. J. **Underwriters** — Dillon, Read & Co. Inc., and Lazard Freres & Co., both of New York City.

Esquire Radio & Electronics, Inc. (5/25)
March 30 filed 150,000 shares of common stock (par 10c). **Price**—$5 per share. **Proceeds**—$73,000 will be used to replace funds used by company for payment of subordinated notes; $50,000 to repay short-term bank obligations; and the balance of approximately $477,000 will be added to working capital and used for general corporate purposes, including financing of finished and raw material inventory. **Office**—39 Broadway, New York. **Underwriter**—Myron A. Lomasney & Co.

Estates, Inc.
Dec. 24 filed 200,000 shares of class A common stock. **Price**—$5 per share. **Proceeds**—For purchase of various properties, for development and subdivision thereof, and to meet operating expenses, salaries and other costs, but principally for the purchase and development of large tracts of land. **Office**—3636-16th Street, N. W., Washington, D. C. **Underwriter**—Consolidated Securities Co. of Washington, D. C. **Offering**—Imminent.

Ets-Hokin & Galvan, Inc. (5/9)
March 28 filed 250,000 shares of common stock (par $1). **Price**—$5.30 per share. **Proceeds**—To be added to company's working capital and will be used principally to reduce some $1,000,000 of its accounts payable. The balance will be used to reduce notes payable to the Bank of America National Trust & Savings Association. **Office**—551 Mission St., San Francisco, Calif. **Underwriter**—Van Alstyne, Noel & Co., New York.

FXR, Inc. (5/9-13)
March 30 filed $2,000,000 of convertible subordinated debentures, due 1970. **Price**—To be supplied by amendment. **Proceeds**—$950,000 will be used to repay short-term notes and up to $375,000 is to be invested in Micromega Corp.; the balance of the proceeds will be used to acquire new facilities, to maintain necessary inventory to meet current and anticipated sales requirements, to supplement working capital and for other general corporate purposes. **Office**—26-12 Borough Place, Woodside, N. Y. **Underwriter**—C. E. Unterberg, Towbin Co.

Farrington Manufacturing Co. (5/2-6)
March 25 filed $6,000,000 of subordinated convertible debentures due 1970. **Price**—To be supplied by amendment. **Proceeds**—$2,000,000 to be applied to the payment of bank loans; $2,800,000 to the scanner program in 1960, including (a) $1,000,000 for expenditures by Farrington Electronics, Inc., a newly-formed date processing subsidiary, for inventory, 250,000 to purchase and test equipment for producing scanners and $250,000 as working capital; and (b) $1,300,000 for research and development. **Office**—77 A St., Needham, Mass. **Underwriters**—Cyrus J. Lawrence & Sons, New York City; and Brawley, Cathers & Co., Toronto, Ontario, Canada.

● Federal Steel Corp. (5/9-13)
March 30 (letter of notification) 59,000 shares of common stock (no par). **Price**—$5 per share. **Proceeds**—For an expansion program. **Office**—3327 Elkton Ave., Dayton 3, Ohio. **Underwriter**—Westheimer & Co., Cincinnati, Ohio.

Figurette, Ltd. (5/9)
March 3 filed 100,000 shares of class A common stock, (par 50 cents) **Price**—$6 per share. **Proceeds**—For general corporate purposes. **Office**—514 N. E. 79th Street, Miami, Fla. **Underwriter**—Myron A. Lomasney & Co., New York.

First National Realty & Construction Corp. (5/9-13)
March 28 filed 150,000 shares of cumulative preferred stock first series, $7 par, 150,000 shares of common stock, and 150,000 shares of common stock purchase warrants, series B. It is proposed that these securities will be offered in units, each unit consisting of one share of preferred, one share of common, and one warrant. **Price**—To be supplied by amendment. **Proceeds** — $182,000 will be used to repay loans made by an officer and director of the company and a corporation controlled by him to provide funds for apartment house construction; about $500,000 will be used for the repayment of a portion of bank notes; and the balance will be added to working capital for use in the acquisition of new properties and for the company's construction program. **Office**—630 Third Avenue, New York. **Underwriter**—H. Hentz & Co., New York.

● Florida Builders, Inc. (5/2-6)
Mar. 30 filed 80,000 shares common stock (par $1). **Price**—To be supplied by amendment. **Proceeds**—Between $200,000 and $250,000 will be used to establish or acquire a Federal Housing Administration approved mortgage financing and service company; $200,000 will be used to pay off bank loans; and the balance for working capital. **Office**—700 43rd St. South, St. Petersburg, Fla. **Underwriter**—Jaffee & Co., New York.

★ Food Fair Stores, Inc. (5/24)
April 14 filed 168,833 shares of common stock. **Price**—To be supplied by amendment. **Proceeds** — To selling stockholders. **Office**—2223 Allegheny Ave., Philadelphia, Pa. **Underwriters**—Eastman Dillon, Union Securities & Co. and A. M. Kidder & Co., both of New York.

Forest City Enterprises, Inc. (5/9-13)
Mar. 29 filed 450,000 shares common stock (par $1). **Price**—To be supplied by amendment. **Proceeds**—For repayment of bank loans and for working capital. **Office**—17903 St. Clair Ave., Cleveland, O. **Underwriter**—Bache & Co., New York.

● Forest Hills Country Club, Ltd. (4/22)
Jan. 29 filed 75,000 shares of common stock (par 10¢). **Price**—$4 per share. **Proceeds**—To build a country club in Forest Hills, L. I., N. Y. **Office**—179—45 Brinckerhoff Ave., Jamaica 33, L. I., N. Y. **Underwriter**—Jerome Robbins & Co., 82 Wall St., New York City.

Founders Mutual Depositor Corp. (5/2-6)
March 25 (letter of notification) 60,000 shares of common stock, class A (no par). **Price**—$4.87½ per share. **Proceeds**—To go to selling stockholders. **Office**—2401 First National Bank Bldg., Denver, Colo. **Underwriter**—Hecker & Co., Philadelphia, Pa.

● Friendly Frost Inc. (5/2-6)
April 5 filed 150,000 shares common stock (par 10c). An additional 96,500 shares included in the registration statement are reserved for the company's Employees' Stock Option Plan. **Price**—$7.50 per share. **Proceeds**—For repayment of bank loans, for company's expansion program, and the balance for working capital. **Office**—123 Frost Street, Westbury, L. I., N. Y. **Underwriter**—None.

Futterman Corp. (5/31-6/3)
April 1 filed 660,000 shares of class A stock. **Price**—To be supplied by amendment. **Proceeds**—For acquisition of properties. **Office**—580 Fifth Avenue, New York. **Underwriter**—Reynolds & Co., New York.

Gem International, Inc. (5/9-13)
Mar. 29 filed 150,000 shares common stock (par $1). **Price**—To be supplied by amendment. **Proceeds**—$125,000 to open, furnish and equip the new Wichita store being built for the company by others; $75,000 to open, furnish and equip the second store in St. Louis, similarly being built by others; $128,600 to purchase the assets of Embee, Inc., and Garrol, Inc., who now hold the basic lease on the premises used by the Kansas City operating company and who sublease the premises to that company; $208,000 for advance to the Honolulu subsidiary to enable it to purchase the assets of Honden, Ltd., Honla Ltd., and Dacat, Ltd., which now hold the basic leases on the store building; $105,000 for advance to Gem Stores, Inc., and Gem of St. Louis, Inc., to enable those corporations to repay loans; and the balance for general corporate purposes and as needed to expand existing facilities and to establish new locations. **Office**—418 Empire Building, Denver, Colo. **Underwriters** — Bosworth, Sullivan & Co., Inc., Denver, Colo.; and Scherck, Richter Co., St. Louis, Mo.

● General Aeromation, Inc. (5/23-27)
March 3 (letter of notification) 84,450 shares of common stock (no par). **Price**—$3 per share. **Proceeds**—For construction of additional vehicles, a demonstration and automation test center and working capital. **Office** — 6011 Montgomery Road, Cincinnati, Ohio. **Underwriter**—Westheimer & Co., Cincinnati, Ohio.

★ General American Transportation Corp. (5/10)
April 14 filed $30,000,000 of Equipment Trust Certificates, due May 1, 1980 (series 58). **Price**—To be supplied by amendment. **Proceeds**—To be used toward reimbursing the company's treasury for the cost (not less than $33,333,334 after adjustment for depreciation) of the cars to be subjected to the Agreement under which the certificates are to be issued. **Office**—135 South LaSalle Street, Chicago, Ill. **Underwriter**—Kuhn, Loeb & Co., New York.

General Atronics Corp. (5/18-22)
March 18 filed 155,660 shares of common stock. **Price**—$3.50 per share. **Proceeds**—$60,000 for additional laboratory and production equipment, $80,000 for additional developmental engineering and sales promotion of materials handling equipment, $80,000 for investment in Atronic Learnings Systems, Inc., $93,000 for repayment of bank loans, and $157,859 for working capital. **Office** — Bala-Cynwyd, Pa. **Underwriter** — Harrison & Co., Philadelphia, Pa.

● General Casting Corp. (4/25-29)
March 25 (letter of notification) 100,000 shares of common stock (par 10 cents). **Price**—$3 per share. **Proceeds**—For general corporate purposes. **Office**—1000 N. Division Street, Peekskill, N. Y. **Underwriters**—Bertner Bros. and Earl Edden Co., New York, N. Y.

● General Development Corp.
March 2 filed $12,555,600 of 6% convertible subordinated debentures, due May 1, 1975, being offered for subscription by holders of the outstanding common in the ratio of $100 principal amount of debentures for each 50 shares of common held of record April 19 with rights to expire on May 4 at 3:30 p.m. EDST. **Price**—100% of principal amount. **Proceeds**—For general corporate purposes. **Office**—2828 S. W. 22nd Street, Miami, Fla. **Underwriter**—Goldman, Sachs & Co., New York City, will head a group which will purchase any unsubscribed debentures.

● General Shale Products Corp. (5/5-10)
March 29 filed 220,605 shares of outstanding common stock (no par). **Price**—To be supplied by amendment. **Proceeds**—To selling stockholders. **Office**—Johnson City, Tenn. **Underwriter**—Equitable Securities Corp., Nashville, Tenn.

Glass Magic Boats, Inc. (4/25)
Dec. 30 (letter of notification) $51,000 of six-year 6½% convertible debentures to be offered in denominations of $51 each. Debentures are convertible into common stock at $1.50 per share. Also, 68,000 shares of common stock (par 10 cents) to be offered in units of one $51 debenture and 68 shares of common stock. **Price**—Of debentures, at par; of stock, $102 per unit. **Proceeds**—To pay off current accounts payable; purchase of raw materials and for expansion. **Office** — 2730 Ludelle

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Street, Fort Worth, Texas. **Underwriter**—R. A. Holman & Co., Inc., New York, N. Y. **Note**—The name has been changed from Glass Magic, Inc.

Goelet Corp. (5/10)
March 1 filed $700,000 of 8% subordinated Installment debentures, due in March, 1970, 70,000 shares of common stock (10 cents par) and 35,000 common stock purchase warrants (exercisable at $4.30 per share until May 15, 1965), to be offered in units consisting of $100 of debentures, 10 common shares, and five warrants. **Price**—$143 per unit. **Proceeds**—To be applied toward the company's general business activities. **Office**—292 Madison Avenue, New York. **Underwriters**—Ross, Lyon & Co., Inc. and Globus, Inc., both of New York.

Gorton's of Gloucester, Inc.
March 22 (letter of notification) 10,100 shares of common stock (no par). **Price**—At-the-market, estimated at $24½ per share. **Proceeds**—To go to selling stockholders. **Office**—327 Main St., Gloucester, Mass. **Underwriter**—Kidder, Peabody & Co., Inc., Boston, Mass.

● **Great American Realty Corp. (5/16-20)**
April 8 filed $2,000,000 of 7% convertible debentures due July 1, 1975, together with 110,000 shares of outstanding class A stock. **Price**—For debentures, at 100% of principal amount. **Proceeds**—For additional working capital. **Office**—15 William St., New York. **Underwriter**—For debentures, Louis L. Rogers Co., 15 William St., New York City and Hilton Securities, Inc., 580 5th Ave., New York City.

Great Southwest Corp.
Dec. 10 filed $11,500,000 of cumulative income debentures, due Jan. 1, 1975, and 575,000 shares of common stock (par $1). Via a prospectus dated March 16, the entire offering has been reduced to 514,293 shares of common stock, of which 457,150 shares will be publicly offered and 57,143 shares will be exchanged for the issuer's 6% debentures. **Price** — To be supplied by amendment. **Proceeds** — For debt reduction and the building of a recreation park. **Office**—3417 Gillespie Street, Dallas 19, Texas. **Underwriter**—Glore, Forgan & Co., New York City. **Note**—This offering has been postponed.

● **Greater Washington Industrial Investments, Inc. (4/28)**
March 21 filed 300,000 shares of common stock. **Price**—$10 per share. **Proceeds**—To be added to other general funds of the company, and will be used to finance the company's principal small business investment company activities of providing equity capital, long-term funds, and management services to scientific and industrial small business concerns in the greater Washington area. Office—1625 Eye Street, N. W. Washington, D. C. **Underwriters**—Johnston Lemon & Co. and Auchincloss, Parker & Redpath, both of Washington, D. C.

Gross Furnace Manufacturing Co., Inc.
March 30 (letter of notification) 120,000 shares of common stock (par 10 cents). **Price** — $2.50 per share. **Proceeds** — For advertising, equipment and working capital. **Office**—c/o Joseph J. Gross, 2411 Sunnybrook Road, Richmond, Va. **Underwriter**—Maryland Securities Co., Inc., Baltimore, Md.

★ **Growth Capital, Inc. (5/9-13)**
April 14 filed 500,000 shares of common stock. **Price**—$20 per share. **Proceeds**—To provide investment capital and management services. **Office** — Bulkley Building, Cleveland, Ohio. **Underwriters**—McDonald & Co., Cleveland, Ohio and Paine, Webber, Jackson & Curtis, N. Y.

● **Gulf-Tex Development, Inc. (5/16-20)**
March 30 filed 250,000 shares of common stock. **Price**—$5 per share. **Proceeds**—For purchase of Pelican Island; for improvements on said property; and for working capital and other general corporate purposes, including the general development of the property. **Office**—714 Rosenberg St., Galveston, Tex. **Underwriter**—Myron A. Lomasney & Co., New York.

Haloid Xerox, Inc.
March 11 filed 333,213 shares of common stock (par $1.25) being offered for subscription by the company to its common stockholders of record April 11, at the rate of one new share for each 10 shares held; rights to expire on April 27 at 3:30 p.m. DST. **Price**—$24 per share. **Proceeds**—To retire some $4,000,000 of bank note indebtedness incurred to replenish working capital which has been reduced primarily by expenditures for tooling and development engineering in connection with the Xerox 914 Office Copier, and for inventories of equipment for leasing. The balance of the proceeds will be added to the company's general funds and will be used primarily for increased inventories of xerographic equipment for leasing, principally for the new copier. **Office**—6 Haloid St., Rochester, N. Y. **Underwriter**—The First Boston Corp., New York.

Hampshire Gardens Associates (5/2)
April 1 filed $376,000 of Limited Partnership Interests, to be offered in units. **Price**—$500 per unit. **Proceeds**—For purchase of the fee title to a garden type apartment community (Hampshire Gardens) consisting of 14 buildings with a total of 134 apartments in Chillum, Md. **Office**—375 Park Avenue, New York. **Underwriter**—B. C. Morton & Company, Inc., New York.

● **Hamilton Management Corp. (5/16-20)**
March 21 filed 320,000 shares of class A common stock, non-voting (par 10 cents). **Price** — To be supplied by amendment. **Proceeds**—To selling stockholders. **Office**—777 Grant Street, Denver, Colo. **Underwriter**—Kidder, Peabody & Co., New York.

Harburton Financial Corp. (5/19)
March 21 (letter of notification) 298,500 shares of class A common stock—non voting (par one cent). **Price**—$1 per share. **Proceeds**—For general corporate purposes. **Office**—56 Beaver Street, New York 4, N. Y. **Underwriter**—Simmons, Rubin & Co., Inc., New York, N. Y.

★ **Harvey Aluminum (Inc.)**
April 21 filed 750,000 shares of class A common stock. **Price**—To be supplied by amendment. **Proceeds**—For expansion and working capital. **Office**—Torrance, Calif. **Underwriters**—Kuhn, Loeb & Co. and Tucker, Anthony & R. L. Day, both of New York City.

Hawley Products Co. (5/2)
Mar. 29 filed 90,000 outstanding shares of common stock (par $5). **Price**—To be supplied by amendment. **Proceeds**—To selling stockholders. **Office**—333-39 North Sixth St., St. Charles, Ill. **Underwriter**—Dean Witter & Co., Chicago and New York.

★ **Henderson's Portion Pak, Inc.**
April 18 filed 200,000 shares of outstanding common stock. **Price**—To be supplied by amendment. **Proceeds**—To selling stockholders. **Office** — 4015 Laguna Street, Coral Gables, Fla. **Underwriter**—Burnham & Co., New York. **Offering**—Expected in late May.

● **Henry's Drive-In, Inc. (4/25-29)**
March 23 (letter of notification) 100,000 shares of common stock (no par). **Price**—$2.50 per share. **Proceeds**—To purchase new sites and build drive-in restaurants for sale or lease to operators for expansion of locations. **Office**—3430 N. Harlem Avenue, Chicago, Ill. **Underwriter**—Westheimer & Co., 326 Walnut Street, Cincinnati, Ohio.

Holt, Rinehart & Winston Inc. (4/28)
March 29 filed 331,740 outstanding shares of its common stock (par $1). **Price**—To be supplied by amendment. **Proceeds**—To selling stockholders. **Office**—New York City. **Underwriters** — Goldman, Sachs & Co., Allen & Co. and Shearson, Hammill & Co., all of New York.

● **Howe Plastics & Chemical Companies, Inc. (4/27-28)**
Dec. 14 (letter of notification) 60,000 shares of common stock (par one cent). **Price**—$3 per share. **Proceeds**—For general corporate purposes. **Office**—125 E. 50th Street, New York, N. Y. **Underwriter**—Hilton Securities, Inc., 580 Fifth Avenue, New York, N. Y.

★ **Hudson Vitamin Products, Inc. (5/23-27)**
April 15 filed 212,500 outstanding shares of common stock. **Price**—To be supplied by amendment. **Proceeds**—To selling stockholders. **Office**—89 Seventh Ave., New York. **Underwriter**—Bear, Stearns & Co., New York.

Hydra-Power Corp. (5/2-6)
March 21 filed $600,000 of 6½% subordinated debentures, due 1970, with warrants to purchase 150 common shares for each $1,000 debenture. **Price**—100% of principal amount. **Proceeds**—$175,000 will be applied to the purchase of capital equipment, raw material and to finance work-in-process and finished products for Power-tronics Systems, Inc., a subsidiary engaged in research and development of a new line of products such as voltage regulators and regulated power companies; $225,000 to be used for similar purposes with respect to the operations of Electro-Powerpacs, Inc., a subsidiary engaged in the design and production of photographic and emergency lighting equipment; $100,000 for reduction of a portion of a $200,000 bank loan; and the balance for general corporate purposes. **Office**—10 Pine Court, New Rochelle, N. Y. **Underwriters**—Aetna Securities Corp. and D. Gleich Co., both of New York.

● **I C Inc. (5/16-20)**
June 29 filed 600,000 shares of common stock (par $1). **Price**—$2.50 per share. **Proceeds**—To further the corporate purposes and in the preparation of the concentrate and enfranchising of bottlers, the local and national promotion and advertising of its beverages, and where necessary to make loans to such bottlers, etc. **Office**—704 Equitable Bldg., Denver, Colo. **Underwriters**— Purvis & Co. and Amos C. Sudler & Co., both of Denver, Colo.

★ **Industrial Rayon Corp.**
April 19 filed 1,687,298 shares of common stock, to be used in connection with the merger into ILR of Texas Butadiene & Chemical Corp. **Office**—Cleveland, Ohio.

Insured Mortgages of America, Inc.
March 14 filed $1,000,000 of 5½% collateral trust bonds. **Price**—At 100% of principal amount. **Proceeds**—To repay temporary bank loans and to purchase additional insured mortgage loans, and for other corporate purposes. **Office**—575 Colman Bldg., Seattle, Wash. **Underwriter**—None.

International Aspirin Corporation
Dec. 7 filed 600,000 shares of common stock constituting their first public offering, subsequently reduced to 300,000 shares (par $1). **Price**—$1 per share. **Proceeds**—For expansion of sales and general corporate purposes. **Office**—1215 Denver U. S. National Center, Denver, Colo. **Underwriter**—Paynter & Co., Fort Morgan, Colo. **Offering**—Imminent.

Interstate Securities Co.
Feb. 23 filed 165,000 shares of 5½% cumulative preference stock, convertible ($20 par), being offered for subscription by common stockholders of record of April 7 on the basis of one new share of preference stock for each four shares held, with rights to expire on April 25, convertible directly into common before April 1, 1965, and into 1.1 shares of common thereafter but before April 1, 1970. The conversion privilege will then expire. The preference stock may be called at from $22 to $20 a share plus dividends March 31, 1970, the preference after March 31, 1975. After, stock will be redeemable for the sinking fund at $20 a share and dividends. **Price** — $20 per share. **Proceeds** — For reduction of short-term notes. **Office**—3430 Broadway, Kansas City, Mo. **Underwriters**—Harriman Ripley & Co., Inc., New York; and Stern Brothers & Co., Kansas City, Mo.

● **Ionics, Inc. (5/9-13)**
March 29 filed 75,000 shares of common stock (par $1). **Price**—To be supplied by amendment. **Proceeds**—Major portion of the net proceeds of sale of additional stock will be added to working capital to be applied toward financing an increasing volume of business and intensified sales efforts, and toward expanding and broadening research and development, including activities in the fuel cell field. The company expects to move to larger quarters near Waltham, Mass., and it estimates that requirements for new equipment and other costs, including moving expenses, will amount to at least $300,000. A portion of the proceeds of the stock sale may be applied to the cost of constructing the new building, but the company does not anticipate that in excess of $400,000 of the net proceeds of this offering will be used on a permanent basis for such purpose. **Office**—152 Sixth Street, Cambridge, Mass. **Underwriters**—Lee Higginson Corp., Shields & Co., and C. E. Unterberg, Towbin Co., all of New York.

Jersey Central Power & Light Co. (5/24)
March 24 filed $10,000,000 of first mortgage bonds due 1990. **Proceeds**—$5,800,000 will be applied to the payment of a like amount of outstanding notes and the balance to 1960 construction expenditures (or reimbursement of the company's treasury thereof). **Underwriter** — To be determined by competitive bidding. Probable bidders: Eastman Dillon, Union Securities & Co. (managing the books), Salomon Bros. & Hutzler and Merrill Lynch, Pierce, Fenner & Smith (jointly). **Bids**—Expected to be received up to 11:00 a.m. (New York Time) on May 24.

Kenrich Petrochemicals, Inc. (5/16)
March 29 filed $175,000 of 7% convertible subordinated debentures due 1970, and 55,000 shares of class A common stock. **Price**—For debentures, 100% of principal amount; and $3.50 per class A share. **Proceeds**—$10,000 will be applied towards the repayment of demand notes, $115,000 for new plant facilities and equipment; and the balance for general corporate purposes. **Office**—120 Wall St., New York. **Underwriter**—First Philadelphia Corp., New York.

● **Keystone Electronics Co., Inc. (5/2-6)**
Feb. 12 filed 200,000 shares of common stock. Of this stock, 133,334 shares are to be offered for public sale for the account of the company and 66,666, being outstanding stock, by the holders thereof. **Price** — $3 per share. **Proceeds**—For additional equipment and inventory; for research and development; and the balance for working capital. **Office**—65 Seventh Ave., Newark, N. J. **Underwriters**—J. A. Winston & Co., Inc. and Netherlands Securities, Inc., both of New York.

★ **Kramer-American Corp.**
April 7 (letter of notification) 300,000 shares of common stock. **Price**—At par ($1 per share). **Proceeds**—For advertising, inventories, training in service department and working capital. **Office** — 404 N. Roxbury Drive, Suite 401, Beverly Hills, Calif. **Underwriter**—None.

Lamour (Dorothy), Inc.
March 30 (letter of notification) 100,000 shares of class A common stock (par 10 cents). **Price**—$3 per share. **Proceeds**—For general corporate purposes. **Office**—65 E. 55th Street, New York 22, N. Y. **Underwriter**—Investment Securities Co. of Maryland, Baltimore, Md.

● **Lawn Electronics Co., Inc. (4/25-29)**
Nov. 25 (letter of notification) 70,000 shares of common stock (par one cent). **Price**—$1.50 per share. **Proceeds**—For general corporate purposes. **Office** — Woodward Road, Englishtown, N. J. **Underwriter**—Prudential Securities Corp., Staten Island, N. Y.

★ **Leader-Toronto Realty Co.**
April 19 filed $800,000 of limited partnership interests, to be offered in units. **Price**—$5,000 per unit. **Office**—New York City. **Underwriter**—None.

Liberty Records, Inc.
April 1 filed 150,000 shares of common stock (par 50c). **Price**—Approximately $8.00 per share. **Proceeds**—To be added to the company's general corporate funds, substantially to meet increased demands on working capital. **Office**—6920 Sunset Boulevard, Los Angeles, Calif. **Underwriter** — Crowell, Weedon & Co., Los Angeles, Calif. **Offering**—Expected mid to late May.

Litecraft Industries, Ltd. (5/9-13)
March 29 filed $750,000 of 6¼% subordinated sinking fund debentures, due 1980, and an undetermined number of common shares, to be offered in units. **Price**—$500 per unit plus accrued interest from May 1, 1960. **Proceeds**—For general corporate purposes. **Office**—Passaic, N. J. **Underwriter**—P. W. Brooks & Co., New York.

Lite-Vent Industries, Inc. (5/16-20)
March 25 filed 100,000 shares of common stock (par $1). **Price**—$5.20 per share. **Proceeds**—To be added to company's general funds, of which $200,000 will be used for repayment of indebtedness, $45,000 to acquire additional roll forming machinery and equipment, $74,000 to repay advances by two officers, and the balance for working capital and other corporate purposes. **Office**—14637 Meyers Road, Detroit, Mich. **Underwriter**—Peter Morgan & Co., New York City.

● **Loveless Properties, Inc. (5/2-6)**
Jan. 20 (letter of notification) 75,000 shares of common stock (par $1). **Price**—$4 per share. **Proceeds**—To pay bills, for acquisition of Lacey Shopping Center, and for working capital. **Office**—603 Central Bldg., Seattle 4, Wash. **Underwriter** — Andersen, Randolph & Co., Inc., Seattle, Wash.

★ **M. C. L., Inc.**
April 8 (letter of notification) 300,000 shares of common stock. **Price**—At par ($1 per share). **Proceeds**—For mining expenses. **Office** — 1143 Lambaren, Livermore, Calif. **Underwriter**—None.

Magnasyc Corp.
Feb. 26 filed 200,000 shares of capital stock. **Price** — $5 per share. **Proceeds**—To repay interim loans up to $100,000 to Taylor & Co.; $100,000 for expansion of laboratory facilities and personnel for research and development; $100,000 to increase plant production facilities; $116,000 for tooling and production of proprietary items; $110,000 for increase of inventory; $75,000 for research and development; and $2,000 for documentary stamps; $110,000 will be added to working capital; and the remaining $88,400 is unallocated. **Office**—5546 Satsuma Ave., North Hollywood, Calif. **Underwriter**—Taylor and Company, Beverly Hills, Calif.

Magnin (Joseph) Co., Inc. (5/2-6)
March 25 filed $1,250,000 of 15-year convertible subordinated debentures due May 1, 1975, and 78,000 shares of common stock (par $1). The debentures and 35,000 common shares are to be offered for public sale by the issuing company and the remaining 43,000 common shares by the present stockholders thereof. **Price**—To be supplied by amendment. **Proceeds**—For the purchase of the Blum's interest in Specialty Shops, Inc., and the balance for general corporate purposes. **Office**—Stockton and O'Farrell Sts., San Francisco, Calif. **Underwriter**—F. S. Smithers & Co., New York City and San Francisco.

• Majestic Specialties, Inc. (5/2-6)
March 25 filed 150,000 outstanding shares of common stock, (no par) to be offered for the account of the present holders thereof. **Price**—To be supplied by amendment. **Proceeds**—To selling stockholders. **Office**—2530 Superior Avenue, Cleveland, Ohio. **Underwriter**—Hayden, Stone & Co., New York.

Major Pool Equipment Corp.
March 21 (letter of notification) 117,000 shares of common stock. **Price**—$2.50 per share. **Proceeds**—For general corporate purposes. **Office**—South Kearny, N. J. **Underwriter**—Hill, Thompson & Co., Inc., New York.

Marquette Corp. (5/2-6)
March 28 filed 461,431 shares of common stock, of which 391,431 shares will be offered for public sale. The shares to be offered for public sale include 275,031 shares to be offered for the account of the company and 116,400 which are outstanding and will be offered for the account of holders thereof. The remaining 70,000 shares are to be reserved for issuance under a new stock option plan. **Price** — For public offering, to be supplied by amendment. **Proceeds**—$400,000 will be expended for the acquisition of land, construction of a new plant, and installation of machinery and equipment for the enlargement of the company's welding electrode manufacturing capacity; an additional $100,000 will be used to retire notes payable to officers; and the balance will be added to working capital and approximately $1,000,000 may be used to reduce temporarily present bank borrowings. **Office**—307 East Hennepin Avenue, Minneapolis, Minn. **Underwriters**—Carl M. Loeb, Rhoades & Co., New York; and Piper, Jaffray & Hopwood, Minneapolis, Minn.

Maryland Acceptance & Finance Co.
March 25 (letter of notification) 100,000 shares of common stock, class A (par 20 cents). **Price**—$3 per share. **Proceeds**—For the purchase, holding and sale of notes. **Office** — 5132 Baltimore Ave., Chamber of Commerce Bldg., Hyattesville, Md. **Underwriter**—E. A. Burka, Inc., Washington, D. C.

Maryland Credit Finance Corp. (5/6)
March 29 filed 28,250 common shares, of which 25,000 shares are being sold for the account of the issuing company, and 3,250 shares are being offered for the account of the present holders thereof. **Price**—To be supplied by amendment. **Proceeds**—For working capital and the reduction of short-term indebtedness. **Office**—Easton, Md. **Underwriter**—Alex Brown & Sons, Baltimore, Md.

★ Mattel, Inc. (5/31-6/3)
April 18 filed 300,000 shares of common stock, of which 50,000 shares are to be offered for public sale for the account of the issuing company and 250,000 shares now outstanding, by the holders thereof. **Price**—To be supplied by amendment. **Proceeds**—For additional working capital. **Office** — 5150 Rosecrans Avenue, Hawthorne, Calif. **Underwriter**—Bache & Co., New York.

Mays (J. W.), Inc. (5/4)
March 29 filed 317,500 shares of outstanding common stock (par $1). **Price**—To be supplied by amendment. **Proceeds** — To selling stockholder. **Office** — Brooklyn, N. Y. **Underwriter** — Merrill Lynch, Pierce, Fenner & Smith Inc., New York City.

★ McCormick Selph Associates, Inc.
April 15 filed 130,000 shares of capital stock, of which 100,000 shares will be offered for public sale by the issuing company and 30,000 shares, being outstanding, by the holders thereof. **Price**—To be supplied by amendment. **Proceeds**—To reduce outstanding indebtedness, to reduce accounts payable, and for additional working capital. **Office**—2308 San Felipe Rd., Hollister, Calif. **Underwriter**—Wilson, Johnson & Higgins, San Francisco, Calif.

Medallion Pictures Corp. (5/16-20)
March 29 (letter of notification) $300,000 of 6½% convertible subordinated debentures due March 30, 1968. **Price**—At 100%. **Proceeds**—For general corporate purposes. **Office**—200 W. 57th Street, New York 18, N. Y. **Underwriter**—Hancock Securities Corp., New York, N. Y.

Medicard, Inc.
March 9 (letter of notification) 300,000 shares of class A common stock. **Price**—At par ($1 per share). **Proceeds**—For reserve for medical loans and operating capital. **Office**—508 Security Bldg., Denver, Colo. **Underwriter**—Equity Investment Corp., same address.

• Melville Shoe Corp. (4/25-29)
March 15 filed $12,000,000 of 20-year debentures, due April 15, 1980. **Price**—To be supplied by amendment. **Proceeds**—For repayment of bank loans, increased working capital, and general corporate purposes. **Office**—New York City. **Underwriter**—Merrill Lynch, Pierce, Fenner & Smith Inc., New York City (managing).

• Menu-Matics, Inc. (4/22)
March 17 (letter of notification) 285,000 shares of common stock (par 10 cents). **Price**—$1 per share. **Proceeds**—For additional production equipment, inventory, and for publicity, research, marketing, and additional working capital. **Office**—176 Oak St., Newton, Mass. **Underwriter**—Pleasant Securities Co., 117 Liberty St., New York, N. Y.

Metalcraft Inc.
March 28 (letter of notification) 85,700 shares of common stock (par 10 cents). **Price**—$3.50 per share. **Proceeds**—For general corporate purposes. **Office**—8608-130th Street, Richmond Hill 18, N. Y. **Underwriters**—First Broad Street Corp.; Bruno-Lenchner Inc., Pittsburgh, Pa.; Russell & Saxe; V. S. Wickett & Co., Inc. and Street & Co., New York, N. Y.

Metal Goods Corp. (4/26)
March 18 filed 100,000 shares of common stock. **Price**—To be supplied by amendment. **Proceeds**—To be used for expansion of warehouse facilities at St. Louis and Dallas and for other corporate purposes including the financing of additional inventories and receivables. **Office** — 8800 Page Blvd., St. Louis, Mo. **Underwriter**—G. H. Walker & Co., St. Louis, Mo.

• Metropolitan Broadcasting Corp. (4/22)
March 10 filed $6,000,000 of convertible subordinated debentures, due 1975. **Price**—To be supplied by amendment. **Proceeds**—For repayment of a temporary bank loan and interest thereon, and for working capital. **Office**—205 East 67th St., New York City. **Underwriters**—Kuhn, Loeb & Co. and Carl M. Loeb, Rhoades & Co., both of New York.

Metropolitan Edison Co. (4/26)
Feb. 29 filed $15,000,000 of first mortgage bonds, due May 1, 1990. **Proceeds** — For 1960 construction program. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc.; White, Weld & Co., Blyth & Co., Inc.; Kidder, Peabody & Co. and Drexel & Co. (jointly). **Bids**—Expected to be received up to 11 a.m. on April 26 at the offices of General Public Utilities Corp., 67 Broad St., New York City. **Information Meeting**—Scheduled between 10:00 a.m. and 12 noon on April 22 at 67 Broad St., 25th floor.

Miami Tile & Terrazzo, Inc.
March 11 filed 125,000 shares of common stock (par $1). **Price**—$4 per share. **Proceeds**—$150,000 as reduction of temporary bank loans, $140,000 in reduction of accounts payable, $65,000 to repay notes and loans payable to Barney B. and Nathan S. Lee, and the balance for general corporate purposes. **Office**—6454 N. E. 4th Ave., Miami, Fla. **Underwriter** — Plymouth Bond & Share Corp., Miami. Fla.

Microdot Inc. (4/27)
March 11 filed 204,000 shares of capital stock (no par) of which 60,000 shares will be offered for public sale by the issuing company, and 144,000 shares are presently outstanding and will be offered for sale by the holder thereof. **Price**—To be supplied by amendment. **Proceeds**—To retire bank loans incurred for working capital purposes in the amount of $406,000; to pay in full promissory notes held by Trustees under the will of M. H. Lewis in the amount of $78,732, and (together with a portion of the proceeds from a bank loan) for the purchase of machinery and equipment costing $200,000, for property additions and improvements, and for working capital. **Office** — 220 Pasadena Ave., South Pasadena, Calif. **Underwriter**—White, Weld & Co., Inc., Los Angeles and New York.

Midwestern Indemnity Co.
March 25 (letter of notification) 15,832 shares of common stock (par $5) to be offered for subscription by stockholders of record at the close of business on March 4, 1960 in the ratio of one share for each three shares held. Offering expires on May 5, 1960. **Price**—$17 per share. **Proceeds**—For working capital. **Address**—Cincinnati, Ohio. **Underwriter**—W. D. Gradison & Co., Cincinnati, Ohio.

Miller & Van Winkle Co. (5/23-27)
April 7 (letter of notification) 75,000 shares of class A stock (par 10 cents). **Price**—$3 per share. **Proceeds**—For general corporate purposes. **Office**—155 Sherman Ave., Paterson, N. J. **Underwriter**—Whitmore, Bruce & Co., New York, N. Y.

• Mills Factors Corp. (4/26)
March 8 filed 208,460 shares of common stock ($2.50 par), **Price**—$11 per share. **Proceeds**—To purchase outstanding stock and for the general fund. **Office** — New York City. **Underwriters**—Lee Higginson Corp. and C. E. Unterberg, Towbin Co., both of New York City.

Milwaukee Gas Light Co. (5/17)
March 25 filed $22,000,000 of first mortgage bonds, series due 1985. **Proceeds**—Together with $4,000,008 to be received from the sale of additional common stock to American Natural Gas Co. (parent) and treasury funds, will be used to pay off $11,115,000 of bank borrowings for construction purposes and to provide additional funds for current construction expenditures or reimburse the company's treasury therefor. **Office** — 626 East Wisconsin Ave., Milwaukee, Wis. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co., Inc.; Kidder, Peabody & Co.; Kuhn, Loeb & Co. and Blyth & Co., Inc. (jointly). **Bids**—Tentatively to be received on May 17 at 10:30 a.m. (EDST) at the offices of the American Natural Gas Co., Suite 1730, 165 Broadway, New York City. **Information Meeting**—Scheduled for May 16 at 11:00 a.m. (EDST) 18th floor, 70 Broadway, New York City.

Missile Electronics, Inc. (5/16-20)
Feb. 5 filed 214,500 shares of common stock, of which 200,000 shares will be sold for the company's account and the remaining 14,500 shares will be offered for the account of certain selling stockholders. **Price**—$3 per share. **Proceeds**—For general corporate purposes. **Office**—89 West 3rd St., New York City. **Underwriter**—Pleasant Securities Co. of Newark, N. J.

• Mister Service, Inc. (5/16-20)
April 11 (letter of notification) 80,000 shares of common stock (par 20 cents). **Price**—$2 per share. **Proceeds**—For general corporate purposes. **Office**—338 Lafayette Street, Newark, N. J. **Underwriter**—Jacey Securities Co., New York, N. Y.

• Monarch Tile Manufacturing, Inc. (4/25-29)
March 22 filed 58,337 shares of common stock (par $5) of which 30,000 shares are to be offered for public sale in behalf of the issuing company, and the remaining 28,337 shares are to be offered for the accounts of certain selling stockholders. **Price**—To be supplied by amendment. **Proceeds** — For repayment of bank loans and for general corporate purposes. **Office**—Oakes Street at Avenue B, San Angelo, Texas. **Underwriter**—Rauscher, Pierce & Co., Inc., Dallas, Texas.

Mutual Employees Trademart, Inc.
Feb. 25 (letter of notification) 200,000 shares of common stock (par $1). **Price**—$1.50 per share. **Proceeds**—To repay current liabilities and other debts and for working capital. **Office** — 1055 Hialeah, Fla. **Underwriter**—Frank Edenfield & Co., Miami, Fla.

• NAFI Corp. (4/25)
March 14 filed 200,000 shares of capital stock (par $1). **Price**—To be supplied by amendment. **Proceeds**—To repay bank loan incurred in connection with acquisition of Chris-Craft Corp. and the balance to be added to the company's general funds. **Office**—527 23rd Ave., Oakland, Calif. **Underwriter**—Shields & Co., New York.

Nalley's, Inc. (5/2-6)
March 25 filed $1,000,000 of convertible subordinated debentures due April 1, 1975. **Price**—To be supplied by amendment. **Proceeds**—$300,000 will be used for the reduction of notes payable to banks and $150,000 will be invested in subsidiaries, either as additional equity or in the form of advances, and the balance of the proceeds will be used to augment the company's working capital position. **Office**—3410 South Lawrence St., Tacoma, Wash. **Underwriter** — Dean Witter & Co., San Francisco.

National Old Line Life Insurance Co.
April 12 filed 128,329 shares of class BB (non-voting) common stock, of which 43,329 shares are to be offered for the account of the issuing company and 80,000 shares representing outstanding stock, are to be offered for the account of the present holders thereof. **Price**—To be supplied by amendment. **Proceeds** — For general corporate purposes. **Office** — Little Rock, Ark. **Underwriter**—Equitable Securities Corp., Nashville, Tenn.

• National Lawnservice Corp. (5/9-13)
Jan. 11 (letter of notification) 100,000 shares of common stock (par one cent). **Price**—$3 per share. **Proceeds** — For general corporate purposes. **Office** — 410 Livingston Avenue, North Babylon, N. Y. **Underwriter**—Fund Planning Inc., New York, N. Y.

• National Packaging Corp. (5/10)
March 30 filed 60,000 of common capital stock (par $1). **Price**—$6 per share. **Proceeds**—To retire $87,000 of indebtedness, to purchase $18,000 of additional machinery and equipment, to set up a small plant (at cost of $28,000) on the West Coast to service the fruit tray and vegetable tray business in that area, and for working capital. **Office** — 3002 Brooklyn Ave., Fort Wayne, Ind. **Underwriter**—First Securities Corp., 212 W. Jefferson St., Ft. Wayne, Ind.

National Union Life Insurance Co.
March 29 (letter of notification) 50,000 shares of common stock (par 50 cents). **Price**—$4 per share. **Proceeds**—For expenses in the operation of an insurance company. **Address**—Montgomery, Ala. **Underwriter**—Frank B. Bateman, Ltd., Palm Beach, Fla.

Newark Electronics Corp. (5/2-6)
March 17 filed 200,000 shares of common stock. **Price**—To be supplied by amendment. **Proceeds**—To be added to the company's working capital. **Office**—223 West Madison St., Chicago, Ill. **Underwriter**—H. M. Byllesby & Co., Inc., Chicago, Ill.

New Jersey Aluminum Extrusion Co., Inc. (5/3)
March 10 filed 110,000 shares of class A capital stock, of which 50,000 shares will be issued by the company and 60,000 shares are outstanding and will be offered by the holders thereof. **Price**—To be supplied by amendment. **Proceeds**—To be added to the general funds of the company and be available for general corporate purposes. **Office** — New Brunswick, N. J. **Underwriter** — Laird & Company Corp., New York and Wilmington, Del.

New Jersey Natural Gas Co. (4/25-29)
March 29 filed $3,830,000 of convertible debentures, series due 1970, to be offered to holders of its outstanding common stock at the rate of $4 principal amount of convertible debentures for each share held. The debentures will be sold at principal amount in denominations of $50, $100, $500, $1,000 and multiples of $1,000. **Proceeds**—To be applied to the partial payment of short-term bank loans outstanding in the amount of $5,000,000 and obtained in connection with the company's construction program. **Office** — 601 Bangs Ave., Asbury Park, N. J. **Underwriter**—Allen & Co., New York.

North Central Co. (5/27)
March 11 filed 420,945 shares of common stock (par $1). The company proposes to offer 142,860 shares for cash sale

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at $7 per share. Additional shares (amount unspecified) are to be offered in exchange for outstanding shares of North Central Life Insurance Co., of St. Paul. The rate of exchange is to be supplied by amendment. **Proceeds**—To be added to the general funds of the company. **Office**—335 Minnesota St., St. Paul, Minn. **Underwriter**—None.

Nuclear Research Chemicals, Inc. (5/10)
April 1 (letter of notification) 20,000 shares of common stock, class A (par $1). **Price**—$10 per share. **Proceeds**—To retire debts, to purchase laboratory equipment and supplies and for working capital. **Office**—100 N. Crystal Lake Drive, Orlando, Fla. **Underwriters**—Security Associates, Inc., Winter Park, Fla.; George O'Neill & Co., Inc., Miami Fla. and Roman & Johnson, Fort Lauderdale, Fla.

★ **Obear-Nester Glass Co. (5/23-27)**
April 14 filed 210,045 shares of common stock. **Price**—To be supplied by amendment. **Proceeds** — To selling stockholders. **Office**—Broadway and 20th, East St. Louis, Illinois. **Underwriter**—Merrill Lynch, Pierce, Fenner & Smith Inc., New York.

OK Rubber Welders, Inc. (5/9-13)
Mar. 29 filed 50,000 shares common stock (par $10). **Price**—To be supplied by amendment. **Proceeds**—Together with the proceeds of a $1,100,000 insurance company loan and $700,000 realized from the sale of installment notes to its wholly-owned susbidiary finance company, OK Acceptance Corp., will be used to reduce bank loans in the amount of $1,300,000; to repay other indebtedness in the amount of $228,600; and the balance of approximately $800,000 will be added to working capital. **Office**—551 Rio Grande Avenue, Littleton, Colo. **Underwriter**—Bosworth, Sullivan & Co., Inc., Denver, Colo.

● **Orange & Rockland Utilities, Inc.**
March 17 filed 39,165 shares of convertible cumulative preferred stock, series E, 5% (par $100) being offered for subscription by holders of its outstanding common stock of record April 14, 1960, at the rate of one share of preferred for each 50 shares of common then held; rights expire at 5:00 p.m. (EDST) on May 2. **Price**—$100 per share. **Proceeds**—To be applied to the reduction of bank notes (the proceeds of which were used for construction) and the balance will be used for further construction. **Office**—10 North Broadway, Nyack, N. Y. **Underwriter**—The First Boston Corp., New York

Otarion Listener Corp. (5/9-13)
March 28 filed 141,750 shares of common stock (par 10c). **Price**—$4 per share. **Proceeds**—Company will apply $150,000 to repay existing short-term obligations to banks; $60,000 in payment for the net assets and name of Taconic Factors, Inc. ,the stock of which is presently owned by Leland E. Rosemond, President and Board Chairman of Otarion; $100,000 for dealer and consumer advertising of the company's new model hearing aids; $40,000 for the establishment of production and sales facilities of a low-cost hearing aid in the European common market; $35,000 for research and development of subminiature products; and the balance of approximately $100,000 to be added initially to working capital and used for general corporate purposes, including financing of finished and semi-finished inventory. **Office**—Scarborough Park, Ossining, N. Y. Underwriter—D. A. Lomasney & Co., New York.

Ott Chemical Co. (5/2-6)
March 17 filed $450,000 of convertible subordinated debentures due May 1, 1970. The company proposes to offer the debentures for subscription by common stockholders of record May 1, 1960, at the rate of a $100 debenture for each 3.11 shares then held. **Price**—100% of principal amount. **Proceeds**—For retirement of a note, for additional and improvements to properties, for equipment and the balance for working capital and other purposes. **Office** — 500 Agard Road, Muskegon, Mich. **Underwriter**—H. M. Byllesby & Co., Inc., Chicago, Illinois.

Pacemaker Boat Trailer Co., Inc. (4/25-29)
Feb. 29 (letter of notification) 300,000 shares of common stock (par 10 cents). **Price**—$1 per share. **Proceeds**—For purchase of equipment, raw materials and working caiptal. **Office**—622 E. Glenolden Ave., Glenolden, Pa. **Underwriters**—Jacey Securities Co., and First City Securities, Inc., New York, N. Y.

★ **Pacific Coast Properties, Inc.**
April 19 filed 2,610,301 shares of common stock, of which 917,835 shares will be offered at $10 per share to the holders of Food Giant Markets, Inc. common, preferred, and employee stock options. **Price**—For remainder of offering to be supplied by amendment. **Proceeds**—$906,000 toward cost of property acquisition and the remainder for general corporate purposes. **Office**—Beverly Hills, Calif. **Underwriter**—Bear, Stearns & Co.

Pacific Panel Co. (5/2-6)
Feb. 8 filed 100,000 shares of class A common stock, subsequently increased to 150,000 shares (par 50 cents). **Price**—$3. **Proceeds**—For reduction of indebtedness, for working capital; for establishment of three additional outlets and to provide additional working capital for a new subsidiary. **Office**—1212 West 26th Street, Vancouver, Wash. **Underwriter**—Frank Karasik & Co., Inc.

Pacific Vegetable Oil Corp. (5/2)
March 24 filed $2,500,000 of convertible subordinated debentures due April 1975. **Price**—To be supplied by amendment. **Proceeds**—$600,000 will be used to retire a like amount of 6¼% promissory notes; $431,250 to pay the balance of the negotiated price for the minority interest of Utah Construction & Mining Co. in Stockton Elevators, a subsidiary; and the balance for working capital. **Office**—62 Townsend St., San Francisco, Calif. **Underwriters**—Dean Witter & Co., San Francisco and New York, and Hooker & Fay, Inc., of San Francisco, Calif.

Patrick County Canning Co., Inc. (5/31-6/3)
March 25 filed 140,000 shares of common stock. **Price**—$3 per share. **Proceeds**—About $162,000 will be applied to the payment of certain indebtedness; $25,000 for additional machinery and equipment; and $118,752 for working capital, promotion and advertising. **Office**—52 Broadway, New York. **Underwriter** — G. Everett Parks & Co., Inc., New York.

Pearson Corp.
March 30 filed 50,000 shares of common stock. **Price**—To be supplied by amendment. **Proceeds**—$60,000 will be utilized to repay the company's indebtedness to Business Development Co. of Rhode Island; the balance will be added to working capital for general corporate purposes, principally to finance inventory and for other manufacturing costs. **Office**—1 Constitution St., Bristol, R. I. **Underwriter**—R. A. Holman & Co., Inc., New York. **Offering**—Expected in June.

● **Pendleton Tool Industries, Inc. (5/16-20)**
March 25 filed 50,000 shares of common stock (par $1). **Price**—To be supplied by amendment. **Proceeds**—To retire a 5% note given to the V-T Co. in partial payment of its business and certain of its assets, and the remainder of the net proceeds will be added to working capital. **Office**—2209 Santa Fe Ave., Los Angeles, Calif. **Underwriters**—Kidder, Peabody & Co., New York; and McDonald & Co., Cleveland, Ohio.

Pennsylvania Electric Co. (5/9)
March 10 filed $12,000,000 of first mortgage bonds, due May 1, 1990. **Proceeds**—To be applied to the company's 1960 construction program, or to partially reimburse its treasury for previous expenditures for that purpose. **Office**—222 Levergood St., Johnstown, Pa. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc.; Kidder, Peabody & Co., Eastman Dillon, Union Securities & Co., Merrill Lynch, Pierce, Fenner & Smith Inc. and White, Weld & Co. (jointly); The First Boston Corp.; Harriman Ripley & Co. Inc. and Blyth & Co., Inc. (jointly); Equitable Securities Corp. **Bids**—Expected May 9 at 12 noon New York time at the offices of General Public Utilities Corp., 67 Broad St., New York City. **Information Meeting** — Scheduled for May 6 between 10:00 a.m. and 12 noon.

★ **Piper Aircraft Corp. (5/23-27)**
April 15 filed 100,000 shares of common stock, (par $1). **Price**—To be related to the current market for outstanding shares at the time of offering. **Proceeds**—To repay a $1,000,000 short-term bank loan. **Office**—820 East Bald Eagle St., Lock Haven, Pa. **Underwriter**—The First Boston Corp., New York.

Plastic & Fibers, Inc.
Jan. 18 (letter of notification) 85,714 shares of common stock (par 40 cents). **Price**—$3.50 per share. **Proceeds**—For general corporate purposes. **Office** — Whitehead Ave., South River, N. J. **Underwriter**—Arnold Malkan & Co., Inc., New York, N. Y.

Precision Circuits, Inc. (5/2)
March 7 filed $250,000 of convertible subordinated debentures, due April 1, 1970, and 37,500 shares of common stock (par 20 cents) to be offered in units consisting of one $100 debenture and 15 common shares. **Price**—$150 per unit. **Proceeds**—For equipping of new facilities, and for general corporate purposes. **Office**—705 South Fulton Avenue, Mount Vernon, N. Y. **Underwriter**—Myron A. Lomasney & Co., New York.

● **Premier Industrial Corp. (4/25-29)**
March 28 filed 212,500 outstanding shares of common stock (par $1) of which 200,000 shares will be offered for public sale and 12,500 shares to employees of the company by the holders thereof. **Price**—To be supplied by amendment. **Proceeds**—To selling stockholders. **Office**—4415 Euclid Avenue, Cleveland, Ohio. **Underwriter**—A. G. Becker & Co. Inc., New York and Chicago.

Pyramid Mouldings, Inc. (5/2-6)
March 30 filed 158,000 shares of common stock (par $1) of which 3,588 shares are to be offered for public sale by the issuing company and the balance, being outstanding stock, by present holders thereof. **Price**—$11 per share. **Proceeds**—to be added to the company's working capital and used for general corporate purposes. **Office**—5353 West Armstrong Ave., Chicago, Ill. **Underwriters**—A. C. Allyn & Co., Inc., and Shillinglaw, Bolger & Co., both of Chicago, Ill.

Radiant Lamp Corp. (5/2-6)
Feb. 10 filed 120,000 shares of class A stock. **Price**—$5 per share. **Proceeds** — To repay a bank loan, and for working capital. **Office**—300 Jelliff Ave., Newark, N. J. **Underwriter**—Amos Treat & Co., Inc., New York.

● **Rajac Self-Service, Inc. (5/9)**
March 18 (letter of notification) 100,000 shares of common stock (par 10 cents). **Price**—$3 per share. **Proceeds**—For general corporate purposes. **Office**—11 E. Second Street, Mt. Vernon, N. Y. **Underwriter**—Walter R. Blaha & Co., Inc., Long Island City, N. Y.

● **Rap-in-Wax Co. (4/22)**
March 18 filed 107,290 shares of common stock ($1 par), of which 70,000 shares are to be offered for public sale by the issuing company. The remaining 37,290 shares are now outstanding and are to be offered by the present holders thereof. **Price** — To be supplied by amendment. **Proceeds**—For additional working capital. **Office** — 150-26th Ave., S. E., Minneapolis 14, Minn. **Underwriter**—Dean Witter & Co., New York and Minneapolis.

● **Raymond Corp. (5/2)**
March 22 (letter of notification) 15,000 shares of common stock (par $5). **Price** — $20 per share. **Proceeds** — For general corporate purposes. **Office** — Village of Greene, County of Chenango, of New York. **Underwriter**—George D. B. Bonbright & Co., Rochester, New York.

Reeves Broadcasting & Development Corp. (5/31-6/3)
March 30 filed 487,392 shares of common stock, of which 300,000 shares are to be publicly offered and 187,392 shares are to be purchased by Christiana Oil at $4.75 per share and distributed as a dividend to its 2,800 stockholders. **Price**—$5 per share. **Proceeds**—To pay a $110,000 bank note and for general corporate purposes. **Office**—304 East 44th St., New York. **Underwriter**—Laird & Co. Corp., New York.

Reeves Soundcraft Corp.
March 30 filed 125,000 outstanding shares of common stock. **Price**—To be sold on the American Stock Exchange or otherwise from time to time at prices current at the time of sale. **Proceeds**—To selling stockholders. **Office**—15 Great Pasture Rd., Danbury, Conn.

Reliance Manufacturing Co. (5/2-6)
March 28 filed 150,000 shares of common stock (par $5), of which 40,000 shares are to be offered for public sale for account of company. The remaining 110,000 shares are now outstanding and are to be offered for sale by the present holder thereof. **Price**—To be supplied by amendment. **Proceeds**—For repayment of short-term bank debt. **Office**—350 Fifth Ave., N. Y. **Underwriter**—Glore, Forgan & Co., New York.

★ **Reliance Manufacturing Co.**
April 13 filed 110,250 shares of common stock, to be offered to management employees who have been or may in the future be granted options to purchase such shares pursuant to the company's Key Employees' Stock Option Plan. **Office**—350 Fifth Ave., New York City.

Renner, Inc. (4/25-29)
March 11 (letter of notification) 75,000 shares of common stock (par 50 cents). **Price**—$4 per share. **Proceeds**—For working capital. **Office** — 1530 Lombard St., Philadelphia, Pa. **Underwriter** — Stroud & Co., Inc., Philadelphia, Pa.

Ritter Finance Co., Inc. (5/2-13)
March 16 filed $1,500,000 of 6½% debentures due May 1, 1975 and warrants for the purchase of 75,000 class B common shares up to April 30, 1970. It is proposed to offer these securities of public sale in units, each consisting of one $1,000 debenture and a warrant for 50 class B shares. **Price**—$1,000 per unit. **Proceeds**—To be added to the company's general funds and used initially to reduce bank loans. **Office**—Church Road and Greenwood Ave., Wyncote, Pa. **Underwriter**—Stroud & Co., Inc., Philadelphia, Pa.

● **Roller Derby TV, Inc.**
March 30 filed 277,000 shares of common stock, of which 117,000 shares are to be offered for public sale by the issuing company, and the remaining 145,000 shares will be sold for the account of certain selling stockholders. **Price**—To be supplied by amendment. **Proceeds**—For general corporate purposes relating to the production and sales of motion picture films of the Roller Derby, and the balance for working capital. **Office**—4435 Woodley Ave., Encino, Calif. **Underwriter**—To be supplied by amendment.

★ **Savannah Newspapers, Inc.**
April 20 filed 480,000 shares of common stock. **Price**—$5.25 per share in lots of 20,000 or more; otherwise $5.55 per share. **Office**—Savannah, Ga. **Underwriter**—Johnson, Lane, Space Corp., Savannah, Ga.

● **Schaevitz Engineering (5/2-6)**
March 29 (letter of notification) 100,000 shares of class A common stock (par 10 cents). **Price**—$3 per share. **Proceeds**—For general corporate purposes. **Address**—U. S. Route 130 and Schaevitz Boulevard Pennsauken Township, N. J. **Underwriter**—Woodcock, Moyer, Fricke & French, Inc., Philadelphia, Pa.

Scott Aviation Corp.
Mar. 29 filed 169,680 shares common stock (par $1), of which 62,000 shares are to be offered for public sale by issuing company and 107,680 shares, being outstanding stock, by the holders thereof, 8,000 shares are to be reserved for allotment to directors, officers and employees of the company. **Price** — To be supplied by amendment. **Proceeds**—To pay off $300,000 of bank indebtedness and for general working capital purposes. **Office**—225 Erie St., Lancaster, N. Y. **Underwriter**—The First Cleveland Corp., Cleveland, Ohio. **Offering**—Expected in mid-May.

Seaboard Plywood & Lumber Corp. (4/25-29)
Feb. 25 filed $300,000 of 6½% subordinated convertible debentures, due April 1, 1970, and 30,000 shares of common stock, to be offered in units, each unit consists of $500 principal amount of debentures and 50 shares of common stock (par $1). **Price**—To be supplied by amendment. **Proceeds**—To retire a term bank loan, and for working capital. **Office**—17 Bridge St., Watertown, Mass. **Underwriter**—Peter Morgan & Co., New York.

★ **Security Industrial Loan Association (5/23-27)**
April 13 filed $500,000 of 7% convertible subordinated debentures due May 1, 1975, and 50,000 shares of common stock. **Prices**—To be supplied by amendment. **Proceeds**—To be available for loans to customers. **Office**—Central National Bank Building, Richmond, Va. **Underwriter**—Lee Higginson Corp., New York.

Service Instrument Corp. (4/25-29)
March 23 (letter of notification) 200,000 shares of common stock (par 10 cents). **Price**—$1.50 per share. **Proceeds** — For general corporate purposes. **Office** — 693 Broadway, New York, N. Y. **Underwriter** — Pearson, Murphy & Co., Inc., New York, N. Y.

Sierra Electric Corp. (5/23-27)
March 29 filed 100,000 shares of common stock, of which 80,000 shares are to be sold for the account of the issuing company and 20,000 shares are to be sold for

the account of the present holder thereof. **Price**—$9 per share. **Proceeds**—To reduce bank loans and for working capital. **Office**—Gardena, Calif. **Underwriter**—Marron, Sloss & Co., Inc., New York City.

● Simmonds Precision Products, Inc. (5/16)
March 30 filed 112,500 shares of common stock (par $1) constituting its first public offering, of which 100,000 shares are to be offered for public sale by the issuing company and 12,500 shares being outstanding stock, by Geoffrey R. Simmonds, president. **Price** — To be supplied by amendment. **Proceeds** — To be added to company's working capital, thereby reducing the amount of funds required to be borrowed under its revolving credit agreement and putting the company in a more favorable position to secure, through borrowings, such additional funds as may be required from time to time. **Office**—105 White Plains Rd., Tarrytown, N. Y. **Underwriter**—Shearson, Hammill & Co., New York.

Sire Plan of Normandy Isle, Inc. (5/16)
March 9 filed $225,000 of 10-year 7% debentures and 4,500 shares of $3.50 cumulative, non-callable, participating preferred stock (par $5), to be offered in units, each unit consisting of one $50 debenture and one preferred share. **Price**—$100 per unit. **Proceeds** — To finance acquisition. **Office**—Ingraham Bldg., Miami, Fla. **Underwriter**—Sire Plan Portfolios, Inc., New York.

★ Skyline Homes, Inc.
April 15 filed 115,000 shares of class A common stock. **Price**—To be supplied by amendment. **Proceeds**—To be added to the company's working capital and used for general corporate purposes. **Office**—2520 By-Pass Rd., Elkhart, Ind. **Underwriter**—Rodman & Renshaw, Chicago, Ill.

Smilen Food Stores, Inc. (5/2)
March 25 filed in association with Heritage Industrial Corp. 200,000 shares of Smilen common (par $1) and 200,000 shares of Heritage (par $1). It is proposed to offer these securities for public sale in units, each unit consisting of one share of Smilen and one share of Heritage stock. **Price**—To be supplied by amendment. **Proceeds**—Smilen will use $95,000 of its share of the proceeds for remaining payments under a contract for purchase of two supermarkets and commissary from Windmill Food Stores, Inc.; $300,000 for inventory and supplies for the opening of three new supermarkets; $300,000 to repay bank loans; and the balance for general corporate purposes. Heritage will use its share of the stock as follows: $175,000 for construction and equipping of a supermarket in Franklin Square, L. I., to be leased to Smilen; $500,000 to purchase fixtures and equipment to be leased to Smilen for use in the three supermarkets to be constructed for Smilen by others; $25,000 to pay an indebtedness due Smilen; and the balance for general corporate purposes. **Office** — 47-02 Metropolitan Ave., Brooklyn, N. Y. **Underwriter**—Federman, Stonehill & Co., New York City.

Southern Nevada Telephone Co. (5/2-6)
March 16 filed 100,000 shares of $25 par cumulative convertible preferred stock. **Price**—To be supplied by amendment. **Proceeds** — To retire some $2,000,000 of bank loans and to finance in part the company's continuing construction program. **Office**—125 Las Vegas Blvd. South, Las Vegas, Nev. **Underwriter**—Dean Witter & Co. of San Francisco and New York.

● Southwest Forest Industries, Inc.
Jan. 29 filed not to exceed an aggregate of $13,500,000 of subordinated income debentures, due 1985, and common stock, to be offered in units of such debentures and such common stock. **Price**—To be supplied by amendment. **Proceeds**—For working capital and the construction of new plant. **Office** — 444 First National Bank Building, Phoenix, Ariz. **Underwriter**—White, Weld & Co., New York City. **Offering**—Expected sometime in May.

Spartans Industries, Inc. (5/2-6)
March 31 filed 120,000 outstanding shares of common stock (par $1). **Price**—To be supplied by amendment. **Proceeds**—To selling stockholders. **Office** — 1 West 34th St., New York. **Underwriters**—Shearson, Hammill & Co., and J. C. Bradford & Co., both of New York.

Spring Street Capital Co. (4/25-29)
March 1 filed 3,000 shares of common stock (par $100) to be offered in units of five shares at $1,000 per share. **Proceeds**—For loans to and the purchase of securities of certain business concerns. It may also use a portion of the proceeds to pay the costs and expenditures incidental to its operatons until such time as it has an income from its loans and investments. **Office**—650 South Spring St., Los Angeles, Calif. **Underwriter**—William R. Staats & Co., Los Angeles, Calif.

Squan Marina, Inc. (5/9-13)
March 18 (letter of notification) 150,000 shares of class A common stock (par $1). **Price**—$2 per share. **Proceeds**—For general corporate purposes. **Address**—Route 70 & Upper Manasquan River Bridge, Brielle, N. J. **Underwriter**—B. Fennekohl & Co., New York, N. Y.

● Straza Industries (4/27-28)
March 14 filed 230,000 shares of capital stock (par $1). **Price**—To be supplied by amendment. **Proceeds**—For general corporate purposes and working capital. **Office**—790 Greenfield Drive, El Cajon, Calif. **Underwriter**—J. A. Hogle & Co., of Salt Lake City and New York.

★ Sun Finance & Loan Co.
April 5 (lettter of notification) $300,000 of 15-year subordinated debentures, series B, due April 1, 1975. **Price**—At face value. **Proceeds**—For working capital. **Office**—514 Franklin Street, Tampa, Fla. **Underwriter**—Security Associates, Inc. Winter Park, Fla.

Sun Rubber Co.
Feb. 26 filed $1,000,000 of 6% subordinated debentures due April 1, 1975, and 100,000 shares of common stock (no par), to be offered in units of $100 of debentures and 10 shares of common stock. **Price**—$100 per unit. **Proceeds**—To be used in reorganization. **Office**—366 Fairview Ave., Barberton, Ohio. **Underwriter**—McDonald & Co., Cleveland, Ohio.

● Superior Electric Co. (5/2-6)
March 17 filed 150,000 shares of common stock (par $1). **Price**—To be supplied by amendment. **Proceeds**—For construction. **Office**—Bristol, Conn. **Underwriter**—Lee Higginson Corp., New York City.

★ Swimming Pool Development Co., Inc. (5/31-6/3)
April 15 filed 250,000 shares of common stock. **Price**—$5 per share. **Proceeds**—Principally for additional working capital. **Office**—Florence, Ala. **Underwriter**—Marron, Sloss & Co., Inc., New York.

Szemco, Inc.
March 28 (letter of notification) 200,000 shares of common stock (par 10 cents). **Price** — To be supplied by amendment, and not to exceed $1.50 per share. **Proceeds**—For working capital. **Office**—c/o Otto Edward Szekely, 112 Washington St., Commerce, Ga. **Underwriter**—Frank B. Bateman, Ltd., Palm Beach, Fla.

● Tayco Developments, Inc.
Dec. 23 filed 5,390 shares of common stock being offered for subscription by common stockholders of record Mar. 25 at the rate of ten seventy-fifths of a share for each share held. **Price**—$28.75 per share, with rights to expire on May 5. **Proceeds**—For capital and to secure additional patents on present inventions, and to continue and expand research and development work in the field of liquid compressibility devices and other areas. **Office**—188 Webster St., North Tonawanda, N. Y. **Underwriter**—C. E. Stoltz & Co., New York.

● Taylor Devices, Inc.
Dec. 23 filed 18,705 shares of common stock being offered for subscription by common stockholders of record Mar. 25 on the basis of six-tenths of one share for each share held. **Price** — $28.75 per share, with rights to expire on May 5. **Proceeds** — to repay a short-term loan, for additional working capital, and to establish expanded executive sales and manufacturing personnel and to continue research and development, and the balance to lease or purchase additional factory and office space. **Office**—188 Webster St., North Tonawanda, N. Y. **Underwriter**—C. E. Stoltz & Co., New York.

Telecomputing Corp. (5/16-20)
April 11 filed 100,000 outstanding shares of common stock. **Price**—To be supplied by amendment. **Proceeds**—To selling stockholder. **Office** — 915 North Citrus Ave., Los Angeles, Calif. **Underwriter** — Dean Witter & Co., New York City and Los Angeles.

● Telectro Industries Corp. (5/9-13)
March 21 filed $1,000,000 of 6½% convertible subordinate debentures due 1970. **Price** — 100% of principal amount. **Proceeds**—To be used to eliminate an outstanding bank loan of $700,000 and to provide additional working capital, to be used in part to reduce outstanding accounts payable. **Office**—35-16 37th Street, Long Island City, N. Y. **Underwriter**—Milton D. Blauner & Co., Inc., N. Y. C.

Teleregister Corp. (5/2-6)
March 30 filed $6,000,000 of 6% subordinated sinking fund debentures, due May 1980 (with attached warrants) and 240,000 shares of common stock (no par). These securities are to be offered for sale in units, each consisting of a $1,000 debenture (with 5-year warrants to purchase 20 common shares initially at $15 per share) and 40 shares of common stock. **Price** — To be supplied by amendment. **Proceeds**—For repayment of current credit agreement with bank and the balance will be applied to the company's construction program. **Office**—445 Fairfield Ave., Stamford, Conn. **Underwriters** — Ladenburg, Thalmann & Co., Bear Stearns & Co. and Sutro Bros., all of New York.

Teletray Electronics Systems, Inc. (4/25-29)
Jan. 27 filed 150,000 shares of class A common stock. **Price**—$3 per share. **Proceeds**—For general corporate purposes. **Office**—880 Bonifant Street, Silver Spring, Md. **Underwriter**—A. T. Brod & Co., New York City.

★ Telluride Ski, Inc.
April 8 (letter of notification) 60,000 shares of common stock. **Price**—At par ($5 per share). **Proceeds**—For expenses in building a ski resort. **Address**—Telluride, Colo. **Underwriter**—None.

● Tenax, Inc. (4/25)
Feb. 16 filed 150,000 shares of common stock (par 10 cents). **Price**—$4 per share. **Proceeds**—For expansion of issuer's freezer and food sale business. **Office**—375 Park Avenue, New York City. **Underwriter**—Myron A. Lomasney, New York City.

Texas Eastern Transmission Corp.
April 11 filed $25,000,000 of debentures, due 1980. **Price**—To be supplied by amendment. **Proceeds**—For the reduction of indebtedness and for construction expenses. **Office**—Houston, Texas. **Underwriter**—Dillon, Read & Co., Inc., New York City. **Offering** — Expected late in May.

Thermal Industries of Florida, Inc. (4/25-29)
Feb. 26 filed 120,000 shares of common stock (par $1). **Price**—$6 per share. **Proceeds**—To be added to the company's general reserves. **Office**—Miami, Fla. **Underwriter**—Peter Morgan & Co., New York.

Thurow Electronics, Inc.
March 28 filed 200,000 shares of class A common stock, of which 100,000 shares are to be offered for public sale by the issuing company and the balance by H. M. Carpenter, President. **Price** — $3 per share. **Proceeds** — To be used as additional working capital for inventory and business expansion purposes. **Office**—121 South Water, Tampa, Fla. **Underwriter**—Donald V. Stabell, of St. Petersburg, Fla.

★ Toledo Scale Corp.
April 18 filed 63,640 shares of common stock, to be offered pursuant to the company's Key Employee Restricted Common Stock Option and Ownership Plan. **Office**—Toledo, Ohio.

● Trans Tech Systems, Inc. (5/16)
March 29 filed 65,000 shares of common stock (par one cent). **Price**—$10 per share. **Proceeds**—For general corporate purposes. **Office** — 5505 Wilshire Blvd., Los Angeles 48, Calif. **Underwriter**—Myron A. Lomasney & Co., New York.

Tri-Point Plastics, Inc.
March 15 (letter of notification) 150,000 shares of common stock (par 10 cents). **Price**—$2 per share. **Proceeds**—For general corporate purposes. **Office**—175 I. U. Willets Road, Albertson, L. I., N. Y. **Underwriters**—Amos Treat & Co., Inc. and Martinelli, Hindley & Co., Inc., New York, N. Y.

● Union Financial Corp. (4/28-5/6)
March 11 filed 325,000 shares of common stock ($1 par). **Price**—To be supplied by amendment. **Proceeds**—Together with bank loan, will be used to repay a $6,075,000 balance on an outstanding bank loan, and the balance will be added to working capital. **Office**—232 Superior Ave., Cleveland, Ohio. **Underwriters**—White, Weld & Co. Inc., Chicago and New York; The Ohio Company, Columbus, Ohio; and Sanders & Co., Dallas, Texas.

● United Components, Inc. (5/16-20)
March 2 filed 110,000 shares of common stock, of which 10,000 shares are to be offered to Sheldon Leighton, a director, at $2.50 per share and the remainder is to be publicly offered. **Price**—To be supplied by amendment. **Proceeds** — For new equipment, advertising, and other general corporate purposes. **Office**—Orange, N. J. **Underwriter**—Darius, Inc., New York City.

United Financial Corp. of California (5/16-20)
March 30 filed $6,000,000 of convertible subordinated debentures due April 1, 1975, and 120,000 shares of capital stock, to be offered in units of $100 of debentures and two capital shares. **Price**—To be supplied by amendment. **Proceeds**—Approximately $1,000,000 will be used for general corporate purposes, and the balance will be distributed to holders of the capital stock prior to the issuance and sale of the units. **Office**—425 South La Brea Avenue, Inglewood, Calif. **Underwriter**—Lehman Brothers, New York City.

United States Boat Corp. (5/9-13)
March 28 filed 350,000 shares of common stock to be publicly offered. **Price**—$2 per share. **Proceeds**—$221,826 will be applied to the repayment of loans to United States Pool Corp. which were used for general corporate purposes, and the balance will be utilized for working capital, including a later repayment of $45,000 to U. S. Pool Corp. **Office** — 27 Haynes Avenue, Newark, N. J. **Underwriter**—Richard Bruce & Co., Inc., New York.

Universal Fabricators, Inc. (4/25-29)
Feb. 29 (letter of notification) 60,000 shares of common stock (par $1). **Price** — $5 per share. **Proceeds** — For general corporate purposes. **Office**—1827 Boone Avenue, Bronx 10, N. Y. **Underwriter**—S. Schramm & Co., Inc., New York, N. Y., has withdrawn as underwriter. New underwriter is the James Co., New York City.

Universal Marion Corp.
March 29 filed 31,361 shares of 4½% cumulative preferred stock ($100 par). **Price**—To be offered for sale in the over-the-counter market, or otherwise by public or private sale at $95 per share, or such lesser price or prices which may be obtained. **Proceeds**—To selling stockholders. **Office**—602 Florida Bldg., Jacksonville, Fla. **Underwriter**—None.

★ Universal Marion Corp.
April 15 filed 435,120 shares of common stock, to be offered for subscription by common stockholders at the rate of one new share for each four shares or fraction thereof. The record date is to be supplied by amendment. **Price**—To be supplied by amendment. **Proceeds**—To be added to the general funds of the company and be available for use in developing the company's tract of land near Tampa, Fla., for working capital and for possible acquisition of other properties. **Office**—602 Florida Theater Bldg., Jacksonville, Fla. **Underwriter**—None.

Uranium Reduction Co. (5/2-6)
March 31 filed 200,000 outstanding shares of common stock (par 10 cents). **Price**—To be supplied by amendment. **Proceeds** — To selling stockholders. **Office** — 557 First Security Bldg., Salt Lake City, Utah. **Underwriter**—A. C. Allyn & Co., Inc., Chicago, Ill.

Uris Buildings Corp. (5/2-6)
March 29 filed $20,000,000 of sinking fund debentures (with attached warrants to purchase 800,000 common shares) and 400,000 shares of common stock. The offering will be made only in units, each unit consisting of (a) $100 principal amount of debentures with an attached warrant to purchase four shares of common stock (b) two shares of common stock. **Price**—To be supplied by amendment. **Proceeds**—To repay loans, defray construction costs, and general corporate purposes. **Underwriter**—Kuhn, Loeb & Co., New York.

★ Vector Manufacturing Co., Inc. (5/9-13)
April 14 filed 250,000 shares of common stock. Of this stock, 100,000 shares are to be offered for public sale by the issuing company and 150,000 shares, now outstanding, by the holders thereof. **Price**—To be supplied by amendment. **Proceeds** — For expansion. **Office** — Southampton, Pa. **Underwriter**—Paine, Webber, Jackson & Curtis, New York.

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● Viewlex, Inc. (5/16)
April 12 filed 200,000 shares of class A common stock (par 25 cents). The offering will include 175,000 shares to be issued by the company and 25,000 shares which are outstanding and will be offered for the account of the holders thereof. **Price**—$4 per share. **Proceeds**—$100,000 will be used to purchase additional high speed automatic production equipment; $150,000 for research and development of new products; $75,000 to be reserved to cover the costs of moving present facilities into new and enlarged quarters; and the balance for working capital. **Office** — 35-01 Queens Blvd., Long Island City, N. Y. **Underwriter**—Stanley Heller & Co., New York.

★ Volker (William) & Co., Inc.
April 11 thirteen separate corporate entities of this firm filed amounts of the firm's capital stock varying from 100 shares to 2,950 shares, to be offered to employees and stockholders. **Prices**—From $88.34 to $147.32 per share. **Proceeds**—For working capital. **Underwriter**—None.

● Vulcatron Corp. (4/25-29)
March 11 (letter of notification) 100,000 shares of common stock (par $1). **Price**—$3 per share. **Proceeds**—To set up a plant and equipment, to purchase machinery and equipment, and for working capital. **Office** — c/o William L. Berger, 209 Washington St., Boston, Mass. **Underwriter**—P. de Rensis & Co., Inc., Boston, Mass.

Wallace Properties, Inc. (5/31-6/3)
April 5 filed $12,000,000 principal amount of 6% convertible subordinated debentures, due June 1, 1975 and 360,000 shares of common stock (par $2), to be offered only in units, each consisting of $100 principal amount of debentures and three shares of common stock. **Price**—To be supplied by amendment. **Office**—Dallas, Texas. **Underwriter**—Harriman Ripley & Co., Inc., New York.

★ Waltham Precision Instrument Co., Inc. (5/31-6/3)
April 15 filed 700,000 shares of common stock. It is proposed that this offering will be on a subscription basis to the company's present common stockholders. **Price**—To be supplied by amendment. **Proceeds**—$600,000 to pay the balance of the purchase price for Boesch Manufacturing Co., Inc. stock; $350,000 to pay the 5% chattel mortgage note held by the Secretary of the U. S. Treasury as assignee of the Reconstruction Finance Corp.; $200,000 to pay the 6% secured notes issued as part payment for the stock of Electro-Mec Laboratory, Inc.; and the balance for working capital and other corporate purposes. **Office**—221 Crescent St., Waltham, Mass. **Underwriter**—Schweickart & Co., New York.

● Waltham Watch Co.
March 30 filed $1,500,000 of 7% sinking fund subordinated debentures series A due April 30, 1975, with five-year common stock purchase warrants attached, and 275,000 shares of common stock (par 50 cents). A $1,000 debenture with warrants for the purchase of 50 common shares at an initial exercise price of $3.50 per share, will be offered for sale at $1,000; a total of 75,000 shares being reserved for issuance upon exercise of the warrants. The additional 200,000 shares of common stock will be offered for subscription at $3.50 per share. The offer will be made first to stockholders of record on May 2, 1960, for a period of 30 days. Thereafter the unsubscribed debentures and stock will be offered to the public. **Proceeds**—For working capital. **Office** — 231 South Jefferson St., Chicago, Ill. **Underwriter**—None.

Weldotron Corp. (4/29)
March 23 (letter of notification) 66,666 shares of common stock (par 10 cents). **Price**—$3 per share. **Proceeds**—For general corporate purposes. **Office**—841 Frelinghuysen Ave., Newark 12, N. J. **Underwriters**—Arnold Malkan & Co., Inc. and Street & Co., Inc., New York, N. Y.

Wells Industries Corp. (4/25-29)
Jan. 29 filed 300,000 shares of common stock and warrants for the purchase of an additional 100,000 shares. **Price** — To be supplied by amendment. **Proceeds** — $350,876 will be used to retire certain debts, with the remainder to be used for construction, equipment, and working capital. **Office**—6505 Wilshire Boulevard, Los Angeles, Calif. **Underwriter**—A. T. Brod & Co., New York City.

★ Western Shade Cloth Co. of California, Inc.
April 11 (letter of notification) 320 shares of capital stock (par $25) to be offered to employees. **Price** — $102.77 per share. **Proceeds**—For working capital. **Office**—698 S. Clarence St., Los Angeles, Calif. **Underwriter**—None.

● Whitmoyer Laboratories, Inc. (4/25-29)
Jan. 28 filed 85,000 shares of common stock and $500,000 of 6% subordinated debentures, due 1977, with warrants for the purchase of 10,000 additional common shares at $5 per share. **Price** — For the debentures, 100% of principal amount; for the 85,000 common shares, $6 per share. **Proceeds**—For general corporate purposes, including the reduction of indebtedness, sales promotion, and equipment. **Office**—Myerstown, Pa. **Underwriter**—Hallowell, Sulzberger, Jenks, Kirkland & Co., Philadelphia, Pa.

● Willer Color Television System, Inc.
Jan. 29 (letter of notification) 86,403 shares of common stock (par $1). **Price**—$3 per share. **Proceeds**—For general corporate purposes. **Office**—151 Odell Avenue, Yonkers, N. Y. **Underwriter**—Equity Securities Co., 11 Broadway, New York City.

Wisconsin Electric Power Co.
March 22 filed 561,005 shares of common stock (par $10) to be offered to holders of its outstanding common stock on the basis of one share for each 10 shares held. **Price**—To be supplied by amendment. **Proceeds**—To be used to repay $12,000,000 of short-term bank loans incurred in connection with the company's construction program, and for further construction expenditures. **Office**—231 West Michigan Street, Milwaukee, Wis. **Underwriter**—None.

★ Wisconsin Telephone Co. (5/10)
April 15 filed $20,000,000 of 35-year debentures, due May 1, 1995. **Proceeds**—To be applied toward the repayment of advances from American Telephone & Telegraph Co. (parent) which are expected to approximate $20,300,000 at the time the proceeds are received. **Underwriter** — To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc.; The First Boston Corp.; Morgan Stanley & Co. **Bids**—Expected to be received on May 10 up to 11:00 a.m. (DST) at Room 2315, 195 Broadway, New York City.

Wolverine Shoe & Tanning Corp. (4/25-29)
March 28 filed 100,000 shares of common stock (par $5). **Price**—To be supplied by amendment. **Proceeds**—For additional working capital. **Office** — Rockford, Mich. **Underwriter**—A. G. Becker & Co., Chicago, Ill. and New York.

★ Wonderbowl, Inc.
April 14 filed 3,401,351 shares of common stock. **Price**—$2 per share. **Proceeds**—For purchase of certain property, for constructing a motel on said property and various leasehold improvements on the property. **Office**—7805 Sunset Blvd., Los Angeles, Calif. **Underwriter**—Standard Securities Corp., Los Angeles.

Yale Express System, Inc. (5/9)
March 25 filed 300,000 shares of class A stock (par 25 cents) of which 150,000 shares are to be offered for public sale by the issuing company and the balance by the company's board chairman. **Price** — $5.50 per share. **Proceeds**—$400,000 to restore working capital expended to acquire American Freight Forwarding Corp. and for expansion of the freight forwarder operation; $150,000 to restore funds advanced in connection with the terminal recently constructed in North Bergen, N. J. and the balance for expansion and improvement. **Office**—460 12th Avenue, New York. **Underwriter**—Michael G. Kletz & Co., Inc., New York.

Zero Manufacturing Co. (5/9-13)
March 28 filed 200,000 shares of common stock, of which 125,000 shares are being issued and sold by the company and 75,000 shares are being sold by certain stockholders. **Proceeds**—$250,000 will be used for the construction of a new 33,600 square foot industrial building in Burbank, Calif., $250,000 for the purchase and installation of new machinery and equipment; $150,000 for further research and development in the modular container field; and the balance will be added to working capital. **Office**—1121 Chestnut St., Burbank, Calif. **Underwriter**—Shields & Co., New York.

Prospective Offerings

Acme Steel Co.
March 25 the company's annual report stated that capital improvements during 1960-63, inclusive, have been projected to cost between $40,000,000 and $45,000,000. It is anticipated that a substantial proportion of this money will be forthcoming from depreciation and retained earnings. In addition, the sale of $10,000,000 of preferred stock in 1960 is planned to supply a part of these overall capital requirements. **Office**—Chicago, Ill.

American Cement Co.
March 14 it was announced that the company will issue up to a maximum of 422,030 common shares, which are to be used in connection with the recent acquisitions by the issuer of M. F. Hickey & Co. Inc. of New York City and Graham Brothers, Inc., of Los Angeles.

● Arco Electronics
Mar. 2 it was reported that sometime soon this company is expected to file approximately $500,000 of common stock. **Underwriter**—Michael G. Kletz & Co., of New York City.

Baltimore Gas & Electric Co.
March 3 it was announced by J. Theodore Wolfe, President, that the company plans record construction expenditures of $50,000,000 during 1960, probably financed through the sale of first mortgage bonds. **Offering**—Expected during the first half of 1960.

Black Hills Power & Light Co.
Feb. 11 it was announced that the Federal Power Commission has authorized this utility, of Rapid City, S. D., to issue 7,727 shares of common stock (par $1) as a 2% dividend to its present common holders. No fractional shares will be issued, and stockholders will have the option of buying the additional fractional interest required to make full shares, or to sell their fractional interests. On March 11 the company also filed for FPC approval to issue $1,000,000 of first mortgage bonds, due 1990.

★ Columbia Technical Corp.
April 20 it was reported that a "Reg. A" filing is imminent covering the company's first common stock offering. **Office**—Woodside, L. I., N. Y. **Underwriter**—Diran, Norman & Co., Inc., New York City.

Central Illinois Electric & Gas Co.
Feb. 3 it was reported that around July about $10,000,000 of first mortgage bonds will be filed. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc., Kidder, Peabody & Co., and White, Weld & Co. (jointly); First Boston Corp., Blair & Co., Merrill Lynch, Pierce, Fenner & Smith Inc. and Stone & Webster Securities Corp. (jointly).

Chicago, Milwaukee, St. Paul & Pacific RR. (5/4)
April 8 it was reported that $4,650,000 of equipment trust certificates is scheduled for sale. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc. and Salomon Bros. & Hutzler. **Bids**—Expected to be received on May 4 up to 1:00 p.m. (EDT).

City Gas Co.
March 10 it was reported that this company is expected to file an undetermined amount of common stock sometime in April or May. **Underwriter**—Kidder, Peabody & Co., New York City.

Columbia Gas System, Inc.
March 11 it was announced that further debt financing is planned for later in the year. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co., Inc., Merrill Lynch, Pierce, Fenner & Smith, Inc., and White, Weld & Co. (jointly); Morgan Stanley & Co.; Lehman Brothers., Eastman Dillon, Union Securities & Co., and Goldman, Sachs & Co. (jointly).

Consolidated Edison Co. of New York (6/14)
April 8 it was reported that the company expects to sell $50,000,000 of first refunding mortgage bonds, due 1990. **Underwriter** — To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc. and First Boston Corp. (jointly), and Morgan Stanley & Co. **Bids**—Expected to be received on June 14.

Consolidated Research & Mfg. Corp.
Dec. 16 it was reported that this firm, founded last August as a Delaware corporation, plans its first public financing in the form of a common stock offering scheduled for next spring. **Business**—The company produes spray containers to combat ice, snow, and fog. **Proceeds**—For expansion. **Office**—1184 Chapel St., New Haven, Conn. **President**—Marvin Botwick.

Consumers Power Co.
March 2 it was reported that this company is planning to raise new funds probably from the sale of first mortgage bonds and debentures. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc.; Morgan Stanley & Co.; White, Weld & Co. and Shields & Co. (jointly); First Boston Corp. and Harriman Ripley & Co. (jointly).

Deckert Dynamics, Inc.
March 16 it was announced that 100,000 shares of common stock are expected to be filed in early May. **Proceeds** — For general corporate purposes. **Office** — Palmyra, Pa. **Underwriter**—Plymouth Securities Corp., New York City.

Equitable Gas Co.
March 16 stockholders approved a proposal to increase the company's number of authorized preferred shares to 300,000 from 100,000 and to issue a new non-convertible preferred series. **Proceeds**—To be used to repay approximately $5,000,000 in short-term bank loans and to help finance 1960 construction. **Office** — Boulevard of the Allies, Pittsburgh, Pa.

Florida Power Corp.
March 10 it was reported that $25,000,000 of first mortgage bonds will be sold by this utility, possibly in the fourth quarter of this year. **Proceeds** — For new construction and repayment of bank loans. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc.; Kidder, Peabody & Co. and Merrill Lynch, Pierce, Fenner & Smith Inc. (jointly); First Boston Corp.; Eastman Dillon, Union Securities & Co. and Harriman Ripley & Co. (jointly); Lehman Brothers and Blyth & Co. (jointly).

Florida Power & Light Co.
March 15 it was reported that the company will need about $25,000,000 of new money. The nature of the securities to be issued has not as yet been determined.

Ford Motor Credit Co.
March 28 it was reported that this company is developing plans for borrowing operations, which may include the issuance of debt securities, and possibly occur later this year. **Office**—Detroit, Mich.

Georgia Power Co. (11/3)
Dec. 9 it was announced that the company plans registration of $12,000,000 of 30-year first mortgage bonds with the SEC. **Underwriter** — To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc.; Morgan Stanley & Co.; Equitable Securities Corp., and Eastman Dillon, Union Securities & Co. (jointly); Blyth & Co., Inc., and Kidder, Peabody & Co. (jointly); The First Boston Corp. **Registration**—Scheduled for Sept. 26. **Bids**—Expected to be received on Nov. 3. **Information Meeting**—Scheduled for Oct. 31.

Gulf Power Co. (7/7)
Dec. 9 it was announced that the company plans registration with the SEC of $5,000,000 first mortgage 30-year bonds. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc.; The First Boston Corp.; Equitable Securities Corp.; Kidder, Peabody & Co., and White, Weld & Co. (jointly); Blyth & Co., Inc.; Merrill Lynch, Pierce, Fenner & Smith Inc.; Salomon Bros. & Hutzler, and Drexel & Co. (jointly); Eastman Dillon, Union Securities & Co. **Information Meeting**—Scheduled for July 5, 1960. **Bids**—Expected to be received on July 7. **Registration** — Scheduled for June 3.

Gulf Power Co. (7/7)
Dec. 9 it was announced that the company plans registration of 50,000 shares of preferred stock (par $100). **Underwriter**—To be determined by competitive bidding. Probable bidders: Harriman Ripley & Co.; Eastman Dillon, Union Securities & Co., and Salomon Bros. & Hutzler (jointly); Equitable Securities Corp.; Kidder, Peabody & Co., and White, Weld & Co. (jointly). **Information Meeting**—Scheduled for July 5, 1960. **Bids**—Expected to be received on July 7. **Registration** — Scheduled for June 3.

★ Gulf States Utilities Co. (6/20)
April 19 it was reported that the company will issue and sell $17,000,000 of 1st mtge. bonds. **Underwriter**—To be

determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc.; Stone & Webster Securities Corp.; Merrill Lynch, Pierce, Fenner & Smith Inc. and White, Weld & Co. (jointly); Salomon Bros. & Hutzler and Eastman Dillon, Union Securities & Co. (jointly); Lehman Brothers. **Bids**—Expected to be received on June 20 at 12 noon.

Hayes Aircraft Corp.
Feb. 12 it was reported that an issue of convertible debentures is being discussed and may occur in the next few months. **Office**—Birmingham, Ala. **Possible Underwriter**—Sterne, Agee & Leach, Birmingham, Ala.

Houston Lighting & Power Co.
March 22 it was announced in the company's annual report that it anticipates approximately $35 million in new money will be required in 1960 to support the year's construction program, and to repay outstanding bank loans. Studies to determine the nature and timing of the issuance of additional securities are presently under way. Last August's offering of $25,000,000 of 4⅞% first mortgage bonds was headed by Lehman Brothers, Eastman Dillon, Union Securities & Co. and Salomon Bros. & Hutzler. **Office** — Electric Building, Houston, Texas.

Idaho Power Co.
March 30 it was reported that the company plans to issue and sell $15,000,000 of 1st mortgage bonds due 1990. **Proceeds**—For capital expenditures, etc. **Underwriter** — To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc.; Blyth & Co., Inc., Lazard Freres & Co. and The First Boston Corp. (jointly); Merrill Lynch, Pierce, Fenner & Smith Inc.; Kidder, Peabody & Co. and White, Weld & Co. (jointly); Salomon Bros. & Hutzler and Eastman Dillon, Union Securities & Co. (jointly); Equitable Securities Corp.

Illinois Bell Telephone Co.
March 24 directors authorized plans for a $61,000,000 issue of new common shares. The stockholders will have subscription rights on the basis of one new share for each 10 held at the time of issue. **Proceeds**—To help finance the company's construction program. **Offering**—Expected in June.

★ Indianapolis Power & Light Co. (9/27)
April 18 it was reported that the company will issue and sell $12,000,000 of 30-year first mortgage bonds. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc.; Lehman Brothers; Goldman, Sachs & Co., and The First Boston Corp. (jointly); Eastman Dillon, Union Securities & Co.; White, Weld & Co., and Shields & Co. (jointly); Blyth & Co., Inc.; Equitable Securities Corp. **Bids**—Expected to be received up to 11 a.m. New York Time on Sept. 27.

Iowa Electric Light & Power Co.
March 11 President Sutherland Dows stated that bonds would be sold in order to supplement money to be obtained from temporary bank loans, to acquire the $10,000,000 required to finance 1960 construction. **Office**—Cedar Rapids, Iowa.

Mac Panel Co.
March 23 it was reported that negotiations are still pending regarding the filing of an issue of common stock. **Office**—High Point, N. C. **Underwriter**—Bache & Co., New York City and Charlotte, N. C.

Michigan Wisconsin Pipeline Co.
March 11 it was reported that this company plans to sell approximately $30,000,000 of pipeline bonds sometime in June. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc. and Blyth & Co.

Midland Enterprises Inc.
April 8 it was stated in the company's annual report that it contemplates the issuance on or before March 31, 1961 of a bond issue in an aggregate amount not to exceed $4,000,000. **Proceeds** — To finance river transportation equipment presently on order and expected to be ordered. **Office**—Cincinnati, Ohio.

• Mohawk Insurance Co.
March 16 it was announced that the company expects to register its first public offering during the last week in April. The offering will consist of 75,000 common shares. **Price**—$12 per share. **Proceeds**—For expansion. **Office**—198 Broadway, New York City. **Underwriter**—R. F. Dowd & Co., Inc., 38 Broadway, New York City.

★ Moore-McCormack Lines, Inc. (5/13)
April 18 it was reported that $10,000,000 of U. S. Government insured merchant marine bonds, 5% SS Argentina series, due Nov. 1, 1978 are expected to be delivered on or about May 13. Bonds will be callable beginning May 1, 1965, at prices ranging from 105 down to par. **Price**—Expected to be at par. **Agents**—Kuhn, Loeb & Co. and Lehman Brothers.

★ Neptune Meter Co.
April 20 it was announced that this New York City company may issue not more than 133,334 shares of common stock in connection with a proposed acquisition by Neptune of Power Equipment Co. Stockholders of the Galion, Ohio, company will vote on the acquisition May 6, 1960.

New Jersey Power & Light Company (7/19)
Feb. 17 it was reported that this utility is planning the sale of $5,000,000 of first mortgage bonds, due in 1990. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc.; Kuhn, Loeb & Co., Lehman Brothers and Salomon Bros. & Hutzler (jointly); Equitable Securities Corp.; First Boston Corp.; Merrill Lynch, Pierce, Fenner & Smith Inc.; Eastman Dillon, Union Securities & Co. and White, Weld & Co. (jointly). **Bids**—Expected to be received on July 19.

Northern Illinois Gas Co. (7/13)
Feb. 16 the company's annual report stated that $120,000,000 of new capital will be needed to meet its five-year construction program. April 5 it was announced that the company will sell $25,000,000 of first mortgage bonds. **Proceeds**—To finance a portion of the 1960-1964 construction program. **Underwriter**—To be determined by competitive bidding. Probable bidders: A Halsey Stuart & Co. Inc. group. **Bids**—To be received on July 13.

Northwestern Bell Telephone Co. (6/7)
March 24 directors authorized the sale of a $45,000,000 debenture issue dated June 1, 1960, with maturity in not more than 40 years. **Proceeds**—The funds are needed to meet strong demand for service and to put into effect such service improvements as direct customer dialing of long distant calls. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co., Inc.; The First Boston Corp.; Morgan Stanley & Co.; Eastman Dillon, Union Securities & Co. **Bids**—Expected to be opened on or about June 7.

• Norwalk Co.
March 30 it was reported that the company plans to file an undetermined amount of common stock sometime in May. **Proceeds** — For expansion of business and general corporate purposes. **Office** — Norwalk, Conn. **Underwriter**—Myron A. Lomasney & Co., New York.

★ Orange & Rockland Utilities, Inc.
April 18 it was stated that the company presently expects that such part of its construction program through 1962 and the refunding of $6,442,000 series B bonds maturing in 1961 as is not financed by the sale of the company's 39,165 shares of its convertible cumulative preferred stock, series E, 5% (par $100) will be financed from the proceeds of sale in 1961, subject to market conditions, of $10,000,000 of its first mortgage bonds, from depreciation and retained earnings and, to the extent of any remaining balance, from the proceeds of additional short-term borrowings.

Pacific Power & Light Co.
Jan. 29 it was announced that the company plans to issue at least $20,000,000 of securities, the date and form of which will be announced at a later date. **Proceeds**—To retire $20,000,000 of unsecured promissory notes, to mature on or prior to July 31, 1961. The notes will be issued to finance part of the issuer's 1960-61 construction expenditures, which are expected to total about $61,000,000. **Office**—Portland, Ore.

★ Panhandle Eastern Pipe Line Co.
April 19 it was reported that this company might sell about $65,000,000 of debentures, possibly in the third quarter of this year. **Underwriters** — Merrill Lynch, Pierce, Fenner & Smith Inc. and Peabody & Co., both of New York.

Potomac Electric Power Co.
March 21 it was stated in the company's annual report it is anticipated that their 1960 construction program will amount to $39 million and there will be further financing of about $15 million of an as yet undetermined type. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co., Inc.; First Boston Corp.; Dillon, Read & Co. and Johnston, Lemon & Co. (jointly); Kidder, Peabody & Co. and Merrill Lynch, Pierce, Fenner & Smith (jointly); Lehman Brothers and Eastman Dillon & Union Securities & Co. and Stone & Webster Securities Corp. (jointly).

Public Service Electric & Gas Co.
Feb. 24 it was reported that this company is planning an undetermined type of financing of approximately $85,000,000, sometime this year. **Underwriter**—Merrill Lynch, Pierce, Fenner & Smith Inc.

Public Service Co. of New Hampshire
April 4 it was stated in the company's annual report that short-term borrowings will increase progressively during 1960 until further permanent financing is undertaken later in the year. The timing, type, and amount of this financing has not been determined.

Rochester Gas & Electric Corp.
March 1 it was stated in the company's annual report that the company has filed an application with the New York State Public Service Commission for the right to issue $10,000,000 of new preferred stock. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc.; Kidder, Peabody & Co., White Weld & Co. and Shields & Co. (jointly); Kuhn, Loeb & Co.; Salomon Bros. & Hutzler, Eastman Dillon, Union Securities & Co., and Equitable Securities Corp. (jointly); Blyth & Co., Inc.; The First Boston Corp.

San Diego Gas & Electric Co.
April 8 it was reported that $25,000,000 of bonds is expected to be sold sometime in the third quarter of this year. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc.; Blyth & Co.; First Boston Corp., Eastman Dillon, Union Securities & Co. and Merrill Lynch, Pierce, Fenner & Smith (jointly); Lehman Brothers and Salomon Bros. & Hutzler (jointly).

(Jos.) Schlitz & Co.
March 11 it was reported that a secondary offering might be made this summer. **Underwriters** — Merrill Lynch, Pierce, Fenner & Smith Inc. and Harriman Ripley & Co. Inc., both of New York City.

★ Sierra Pacific Power Co.
April 18 it was reported that this public utility will issue and sell $3,000,000 of bonds, due 1990. **Underwriter**—to be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc.; Kidder, Peabody & Co. and White, Weld & Co. (jointly); Stone & Webster Securities Corp. and Dean Witter & Co. (jointly). Bids—Expected to be received sometime in June.

South Carolina Electric & Gas Co.
March 25, S. C. McMeekin, President, informed this paper of plans to sell an undetermined principal amount of bonds, the timing of which will be subject to market conditions. **Proceeds**—To repay bank loans incurred for current construction program. Previous issues have been placed privately.

Southern California Edison Co.
March 15 it was stated in the company's annual report that besides the $30,000,000 issue of series L mortgage bonds sold to underwriters in January, 1960, an additional $51,000,000 will be needed to complete its estimated $120,000,000 construction program for 1960. This financing is dependent upon market condition, and will probably be some type of debt security.

Southern Electric Generating Co. (6/2)
Dec. 9 it was announced that this company plans registration with the SEC of $40,000,000 of 30-year first mortgage bonds. **Underwriter** — To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc.; Merrill Lynch, Pierce, Fenner & Smith Inc., and Blyth & Co., Inc. (jointly): Morgan Stanley & Co.; White, Weld & Co. and Kidder, Peabody & Co. (jointly); Eastman Dillon, Union Securities & Co.; Equitable Securities Corp., and Drexel & Co. (jointly); The First Boston Corp. **Information Meeting**—Scheduled for May 31, 1960. **Bids**—Expected to be received on June 2. **Registration**—Scheduled for April 29.

Southern Natural Gas Co.
April 4 it was stated in the company's annual report that the company expects to provide for the payment of certain outstanding notes through the issuance of first mortgage bonds and other debt securities. The timing of the issue or issues was not stated in the report. **Office**—Birmingham, Ala.

Southern Union Gas Co.
Feb. 5 it was reported that $11,000,000 in new financing is planned for the late Spring of this year, of an undetermined type. **Underwriters** — A. C. Allyn & Co., and Snow, Sweeney & Co., both of New York City.

Southwestern Bell Telephone Co. (8/9)
March 28 directors of this company recommended a $100,000,000 debenture issue, subject to approval by regulatory authorities. **Proceeds**—To finance an expansion and improvement program over the next five years. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc.; Morgan Stanley & Co. **Bids**—Expected to be received on or about Aug. 9.

Tampa Electric Company
Feb. 2 it was stated in this company's prospectus of its most recent offering, that it contemplates some additional permanent financing in 1960. The exact nature and amount of this financing has not been determined but the company presently believes it will take the form of senior securities.

★ Trans-Canada Pipe Lines Ltd.
April 13 James W. Kerr, President, announced that the company planned to sell $13,000,000 of first mortgage bonds. **Proceeds**—To meet the company's 1960 financial requirements. The company will continue to sell all securities in Canada to the maximum extent considered practical, Mr. Kerr said.

Trans World Airlines, Inc.
April 8 it was announced that the company plans to offer to its stockholders $100,000,000 of subordinated income debentures with detachable common stock purchase warrants, and Hughes Tool Co. (parent) will purchase not only its pro-rata portion ($78,000,000) but also enough of any debentures not taken up by others to provide TWA with at least $100,000,000. **Proceeds** — Together with $190,000,000 proposed private placement which is presently being worked on by this company's bankers, will be used for expansion of the company's jet fleet. **Underwriters**—Dillon, Read & Co., Inc., Lazard Freres & Co., and Lehman Brothers, all of New York.

Union Electric Co.
March 16 it was announced by Dudley Sanford, Executive Vice-President, that the company plans an offering of debt securities in the range of $30,000,000 to $35,000,000. **Proceeds**—To meet construction expenses. **Office**—315 No. 12th Blvd., St. Louis, Mo. **Offering**—Expected in the latter part of this year.

Utah Power & Light Co.
April 12 it was reported that this company will ask stockholders at the annual meeting on May 16, to authorize 2,000,000 shares of $25 par preferred stock, part of which will be sold competitively. **Proceeds**—For construction purposes. **Underwriter**—To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc.; Blyth & Co. and First Boston Corp. (jointly); White, Weld & Co.; Stone & Webster Securities Corp. (jointly); Salomon Bros. & Hutzler; Kidder, Peabody & Co.; Eastman Dillon, Union Securities & Co. and Smith, Barney & Co. (jointly); Lehman Bros.; Bear, Stearns & Co.

Virginia Electric & Power Co. (9/13)
Feb. 5 it was reported that approximately $25,000,000 first mortgage bonds will be offered for sale. **Underwriters** — To be determined by competitive bidding. Probable bidders: Halsey, Stuart & Co. Inc.; Salomon Bros. & Hutzler; White, Weld & Co.; Eastman Dillon, Union Securities & Co.; Stone & Webster Securities Corp. **Bids**—Expected to be received on Sept. 13.

Washington Gas Light Co. (6/7)
March 30 it was reported that the company plans to issue and sell $12,000,000 of refunding mortgage bonds. **Underwriter**—To be determined by competitive bidding. Probable bidders; Halsey, Stuart & Co. Inc.; Kidder, Peabody & Co.; Eastman Dillon, Union Securities & Co.; Equitable Securities Corp. **Information Meeting** — Scheduled for June 3 in New York at 11 a. m. **Bids**—Expected to be received up to 11:30 a. m. on June 7.

Indications of Current Business Activity

The following statistical tabulations cover production and other figures for the latest week or month available. Dates shown in first column are either for the week or month ended on that date, or, in cases of quotations, are as of that date:

		Latest Week	Previous Week	Month Ago	Year Ago
AMERICAN IRON AND STEEL INSTITUTE:					
Indicated Steel operations (per cent capacity)	Apr. 23	§80.9	*78.1	91.1	93.5
Equivalent to—					
Steel ingots and castings (net tons)	Apr. 23	§2,305,000	*2,225,000	2,597,000	2,646,000
AMERICAN PETROLEUM INSTITUTE:					
Crude oil and condensate output—daily average (bbls. of 42 gallons each)	Apr. 8	7,028,410	7,150,510	7,047,060	7,128,985
Crude runs to stills—daily average (bbls.)	Apr. 8	¶8,035,000	7,916,000	7,782,000	8,092,000
Gasoline output (bbls.)	Apr. 8	28,680,000	27,968,000	27,642,000	28,268,000
Kerosene output (bbls.)	Apr. 8	2,755,000	2,414,000	2,476,000	2,107,000
Distillate fuel oil output (bbls.)	Apr. 8	12,638,000	13,091,000	12,149,000	12,602,000
Residual fuel oil output (bbls.)	Apr. 8	6,913,000	6,811,000	7,477,000	6,788,000
Stocks at refineries, bulk terminals, in transit, in pipe lines—					
Finished and unfinished gasoline (bbls.) at	Apr. 8	224,995,000	225,595,000	221,125,000	214,594,000
Kerosene (bbls.) at	Apr. 8	18,221,000	17,538,000	20,536,000	19,281,000
Distillate fuel oil (bbls.) at	Apr. 8	74,419,000	75,119,000	91,176,000	78,994,000
Residual fuel oil (bbls.) at	Apr. 8	39,373,000	39,112,000	43,227,000	57,393,000
ASSOCIATION OF AMERICAN RAILROADS:					
Revenue freight loaded (number of cars)	Apr. 9	598,384	598,031	560,230	619,268
Revenue freight received from connections (no. of cars)	Apr. 9	549,252	562,926	542,659	567,175
CIVIL ENGINEERING CONSTRUCTION — ENGINEERING NEWS-RECORD:					
Total U. S. construction	Apr. 14	$397,800,000	$356,200,000	$374,100,000	$371,300,000
Private construction	Apr. 14	171,400,000	175,700,000	180,900,000	167,700,000
Public construction	Apr. 14	226,400,000	180,500,000	193,200,000	203,600,000
State and municipal	Apr. 14	196,200,000	139,700,000	100,200,000	176,000,000
Federal	Apr. 14	30,200,000	40,800,000	93,000,000	27,600,000
COAL OUTPUT (U. S. BUREAU OF MINES):					
Bituminous coal and lignite (tons)	Apr. 9	8,310,000	7,500,000	7,855,000	8,117,000
Pennsylvania anthracite (tons)	Apr. 9	260,000	365,000	380,000	336,000
DEPARTMENT STORE SALES INDEX—FEDERAL RESERVE SYSTEM—1947-49 AVERAGE = 100	Apr. 9	153	143	116	130
EDISON ELECTRIC INSTITUTE:					
Electric output (in 000 kwh.)	Apr. 16	13,263,000	13,494,000	14,109,000	12,609,000
FAILURES (COMMERCIAL AND INDUSTRIAL) — DUN & BRADSTREET, INC.	Apr. 14	308	333	302	304
IRON AGE COMPOSITE PRICES:					
Finished steel (per lb.)	Apr. 12	6.196c	6.196c	6.196c	6.196c
Pig iron (per gross ton)	Apr. 12	$66.41	$66.41	$66.41	$66.41
Scrap steel (per gross ton)	Apr. 12	$33.50	$33.17	$33.50	$35.17
METAL PRICES (E. & M. J. QUOTATIONS):					
Electrolytic copper—					
Domestic refinery at	Apr. 13	32.600c	32.600c	32.600c	31.175c
Export refinery at	Apr. 13	31.725c	30.975c	30.300c	30.600c
Lead (New York) at	Apr. 13	12.000c	12.000c	12.000c	11.500c
Lead (St. Louis) at	Apr. 13	11.800c	11.800c	11.800c	11.300c
‡Zinc (delivered) at	Apr. 13	13.500c	13.500c	13.500c	11.500c
Zinc (East St. Louis) at	Apr. 13	13.000c	13.000c	13.000c	11.000c
Aluminum (primary pig. 99.5%) at	Apr. 13	26.000c	26.000c	26.000c	24.700c
Straits tin (New York) at	Apr. 13	99.250c	99.500c	100.000c	103.250c
MOODY'S BOND PRICES DAILY AVERAGES:					
U. S. Government Bonds	Apr. 19	83.32	84.05	85.56	84.57
Average corporate	Apr. 19	85.33	85.46	84.94	89.37
Aaa	Apr. 19	89.51	89.51	89.09	92.64
Aa	Apr. 19	87.86	87.99	87.45	91.19
A	Apr. 19	84.81	84.94	84.17	89.78
Baa	Apr. 19	79.72	80.08	79.37	84.04
Railroad Group	Apr. 19	82.77	82.77	82.40	88.13
Public Utilities Group	Apr. 19	86.11	86.38	85.20	89.23
Industrials Group	Apr. 19	87.32	87.72	87.05	90.63
MOODY'S BOND YIELD DAILY AVERAGES:					
U. S. Government Bonds	Apr. 19	4.25	4.15	3.98	4.01
Average corporate	Apr. 19	4.76	4.75	4.79	4.46
Aaa	Apr. 19	4.45	4.45	4.48	4.23
Aa	Apr. 19	4.57	4.56	4.60	4.33
A	Apr. 19	4.80	4.79	4.85	4.43
Baa	Apr. 19	5.21	5.18	5.24	4.86
Railroad Group	Apr. 19	4.96	4.96	4.99	4.55
Public Utilities Group	Apr. 19	4.70	4.68	4.77	4.47
Industrials Group	Apr. 19	4.61	4.58	4.63	4.37
MOODY'S COMMODITY INDEX	Apr. 19	381.2	381.4	375.1	392.0
NATIONAL PAPERBOARD ASSOCIATION:					
Orders received (tons)	Apr. 9	299,289	354,126	292,018	296,719
Production (tons)	Apr. 9	316,815	304,514	319,033	312,695
Percentage of activity	Apr. 9	94	91	94	94
Unfilled orders (tons) at end of period	Apr. 9	450,380	467,129	459,954	482,117
OIL, PAINT AND DRUG REPORTER PRICE INDEX—1949 AVERAGE=100	Apr. 15	110.71	110.85	110.66	111.01
ROUND-LOT TRANSACTIONS FOR ACCOUNT OF MEMBERS, EXCEPT ODD-LOT DEALERS AND SPECIALISTS					
Transactions of specialists in stocks in which registered—					
Total purchases	Mar. 25	2,246,500	1,957,480	1,920,990	1,996,400
Short sales	Mar. 25	396,200	356,530	377,070	369,580
Other sales	Mar. 25	1,706,740	1,631,610	1,569,900	1,566,260
Total sales	Mar. 25	2,102,940	1,988,140	1,946,970	1,935,840
Other transactions initiated off the floor—					
Total purchases	Mar. 25	331,940	345,930	358,800	383,300
Short sales	Mar. 25	44,600	50,600	41,200	21,700
Other sales	Mar. 25	270,130	322,400	365,470	434,120
Total sales	Mar. 25	314,730	303,000	406,670	455,820
Other transactions initiated on the floor—					
Total purchases	Mar. 25	685,215	712,645	646,780	562,540
Short sales	Mar. 25	126,450	94,860	100,750	71,660
Other sales	Mar. 25	593,934	626,657	545,118	552,070
Total sales	Mar. 25	720,384	721,517	645,868	623,730
Total round-lot transactions for account of members—					
Total purchases	Mar. 25	3,263,655	3,016,055	2,926,570	2,942,240
Short sales	Mar. 25	567,250	501,990	519,020	462,940
Other sales	Mar. 25	2,570,804	2,580,667	2,480,488	2,552,450
Total sales	Mar. 25	3,138,054	3,082,657	2,999,508	3,015,390
STOCK TRANSACTIONS FOR ODD-LOT ACCOUNT OF ODD-LOT DEALERS AND SPECIALISTS ON N. Y. STOCK EXCHANGE — SECURITIES EXCHANGE COMMISSION					
Odd-lot sales by dealers (customers' purchases)—†					
Number of shares	Mar. 25	1,519,716	1,535,401	1,569,262	1,420,266
Dollar value	Mar. 25	$73,033,522	$70,801,132	$77,680,054	$70,874,815
Odd-lot purchases by dealers (customers' sales)—					
Number of orders—Customers' total sales	Mar. 25	1,298,812	1,236,448	1,232,207	1,301,227
Customers' short sales	Mar. 25	11,862	15,931	10,610	5,912
Customers' other sales	Mar. 25	1,286,950	1,220,517	1,221,597	1,295,315
Dollar value	Mar. 25	$61,557,659	$55,539,649	$57,503,598	$64,042,553
Round-lot sales by dealers—					
Number of shares—Total sales	Mar. 25	348,560	317,650	265,300	368,660
Short sales	Mar. 25	------	------	------	------
Other sales	Mar. 25	348,560	317,650	265,300	368,660
Round-lot purchases by dealers— Number of shares	Mar. 25	587,670	646,860	622,000	467,240
TOTAL ROUND-LOT STOCK SALES ON THE N. Y. STOCK EXCHANGE AND ROUND-LOT STOCK TRANSACTIONS FOR ACCOUNT OF MEMBERS (SHARES):					
Total round-lot sales—					
Short sales	Mar. 25	709,660	674,720	666,320	529,060
Other sales	Mar. 25	13,341,240	12,535,460	12,302,190	13,150,930
Total sales	Mar. 25	14,050,900	13,210,180	12,968,510	13,679,990
WHOLESALE PRICES, NEW SERIES — U. S. DEPT. OF LABOR — (1947-49 = 100):					
Commodity Group—					
All commodities	Apr. 12	120.1	120.2	120.0	119.9
Farm products	Apr. 12	91.4	*91.5	90.3	92.5
Processed foods	Apr. 12	106.8	*107.2	107.1	107.3
Meats	Apr. 12	95.4	*96.2	96.4	101.8
All commodities other than farm and foods	Apr. 12	128.7	*128.8	128.7	128.1

*Revised figure. ¶Includes 876,000 barrels of foreign crude runs. §Based on new annual capacity of 148,570,970 tons as of Jan. 1, 1960 as against Jan. 1, 1959 basis of 147,633,670 tons. †Number of orders not reported since introduction of Monthly Investment Plan. ‡Prime Western Zinc sold on delivered basis at centers where freight from East St. Louis exceeds one-half cent a pound.

	Latest Month	Previous Month	Year Ago
AMERICAN TRUCKING ASSOCIATION, INC.—Month of January:			
Intercity general freight transported by 360 carriers (in tons)	5,294,275	5,405,744	5,106,867
AMERICAN ZINC INSTITUTE, INC.—Month of March:			
Slab zinc smelter output all grades (tons of 2,000 pounds)	86,028	74,738	79,918
Shipments (tons of 2,000 pounds)	86,524	82,147	74,296
Stocks at end of period (tons)	136,566	137,062	206,083
BUILDING CONSTRUCTION—U. S. DEPT. OF LABOR—Month of March (in millions):			
Total new construction	3,672	3,496	3,840
Private construction	2,705	2,597	2,714
Residential buildings (nonfarm)	1,435	1,353	1,562
New dwelling units	1,107	1,035	1,230
Additions and alterations	260	250	276
Nonhousekeeping	68	68	56
Nonresidential buildings	745	763	625
Industrial	213	218	154
Commercial	305	314	270
Office buildings and warehouses	162	166	149
Stores, restaurants, and garages	143	148	121
Other nonresidential buildings	227	231	201
Religious	74	77	67
Educational	45	46	42
Hospital and institutional	47	48	45
Social and recreational	44	43	34
Miscellaneous	17	17	13
Farm construction	113	103	115
Public utilities	393	359	399
Telephone and telegraph	75	71	75
Other public utilities	318	288	324
All other private	19	19	13
Public construction	967	899	1,126
Residential buildings	58	57	96
Nonresidential buildings	334	305	366
Industrial	29	29	29
Educational	200	182	218
Hospital and institutional	31	28	37
Administrative and service	38	34	47
Other nonresidential buildings	36	32	35
Military facilities	68	68	100
Highways	265	250	328
Sewer and water systems	116	104	110
Sewer	71	64	68
Water	45	40	42
Public service enterprises	37	32	31
Conservation and development	76	71	78
All other public	13	12	17
CIVIL ENGINEERING CONSTRUCTION — ENGINEERING NEWS-RECORD — Month of March (000's omitted):			
Total U. S. construction	$2,001,000	$1,402,000	$1,644,300
Private construction	1,026,000	779,000	837,400
Public construction	975,000	623,000	806,900
State and municipal	712,000	505,000	590,800
Federal	263,000	118,000	216,100
CONSUMER CREDIT OUTSTANDING—BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM—REVISED SERIES—Estimated short and intermediate term credit in millions as of February 29:			
Total consumer credit	$51,021	$51,356	$44,748
Instalment credit	39,408	39,358	34,025
Automobile	16,677	16,568	14,339
Other consumer goods	9,997	10,129	8,727
Repairs and modernization loans	2,695	2,691	2,324
Personal loans	10,039	9,970	8,635
Noninstalment credit	11,613	11,998	10,723
Single payment loans	4,151	4,092	3,697
Charge accounts	4,305	4,816	4,098
Service credit	3,157	3,090	2,928
CONSUMER PRICE INDEX—1947-1949=100— Month of February:			
All items	125.6	125.4	123.7
Food	117.4	117.6	118.2
Food at home	114.4	114.7	116.1
Cereal and bakery products	135.2	134.8	133.8
Meats, poultry and fish	106.2	106.4	112.6
Dairy products	116.5	116.5	114.0
Fruits and vegetables	125.9	125.7	121.2
Other food at home	102.9	104.5	108.1
Food away from home (Jan. 1953=100)	117.8	117.6	114.1
Housing	131.2	130.7	128.5
Rent	141.0	140.9	139.0
Gas and electricity	124.0	123.2	118.5
Solid fuels and fuel oil	139.0	139.0	140.0
Housefurnishings	104.3	104.0	103.8
Household operation	136.3	135.9	133.1
Apparel	108.4	107.9	106.7
Men's and boys'	108.7	108.8	107.8
Women's and girls'	99.3	98.0	98.8
Footwear	138.7	139.4	131.3
Other apparel	92.8	92.2	91.7
Transportation	147.9	148.1	144.3
Private	136.4	136.8	133.3
Public	199.3	197.2	191.8
Medical care	154.7	153.5	148.6
Personal care	132.6	132.7	129.8
Reading and recreation	120.6	120.3	117.1
Other goods and services	131.8	131.8	127.4
MOODY'S WEIGHTED AVERAGE YIELD 100 COMMON STOCKS—Month of Mar.			
Industrials (125)	3.47	3.40	3.28
Railroads (25)	5.50	5.26	4.60
Utilities (not incl. Amer. Tel. & Tel.) (214)	4.01	4.04	3.80
Banks (15)	3.85	3.84	3.95
Insurance (10)	2.87	2.76	2.53
Average (200)	3.59	3.53	3.43
NEW CAPITAL ISSUES IN GREAT BRITAIN MIDLAND BANK LTD.—Month of March	£53,761,000	£42,252,000	£39,686,000
NONFARM REAL ESTATE FORECLOSURES—FEDERAL SAVINGS AND LOAN INSURANCE CORPORATION—Month of Dec.	3,727	3,378	3,522
REAL ESTATE FINANCING IN NONFARM AREAS OF U. S. — HOME LOAN BANK BOARD—Month of Jan. (000's omitted):			
Savings and loan associations	$777,492	$962,910	$870,081
Insurance companies	107,132	138,353	120,843
Banks and trust companies	342,585	409,808	453,677
Mutual savings banks	114,847	151,579	123,169
Individuals	310,054	327,393	300,641
Miscellaneous lending institutions	427,312	496,459	484,084
Total	$2,079,422	$2,486,502	$2,352,495
RYE CONDITION—CROP REPORTING BOARD U. S. DEPT. OF AGRICULTURE— As of April 1	66%	------	84%
WINTER WHEAT PRODUCTION—CROP REPORTING BOARD U. S. DEPT. OF AGRICULTURE—As of Apr. 1 (bushels)	976,957,000	------	923,449,000

OBSERVATIONS . . .

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feelings, especially when the DJIA made a new high in the first week of January. Naturally, we were delighted when we got the bear market *confirmation* on March 3, 1960.

The Luck of the Game

Now perhaps it was just luck that I accumulated stocks back in 1949, and perhaps it was just the luck of "the numbers game," that had me fortunate enough to buy at the right time and to sell about the right time without waiting for the bear market *confirmation* of the signal. I'm sure I don't know. Perhaps it is merely part of this "roulette and horse racing" as you state. I do not know what "refinements" others have made in their interpretations of the Theory. I think as of now, no "refinements" have been necessary. I do know that I have yet to find a single non-specialist who seems to understand the Dow theory. I'm inclined to think from what I've read of Mr. Richard Russell's works, that he is another Dow theorist whose opinions are very good.

Masquerading Tipsters

There are several "tipsters' who mask themselves as "Dow theorists" who know nothing of the theory, but use the name merely to sell their "services" to the unsuspecting public. I've seen several of these "services" and certainly they do give very false information through their "refined" theories.

To summarize: (1) Every bull market consists of three well-defined legs. (2) The sell or buy signals are not the same as the confirmation, but occur long before the confirmation. (3) The signal to sell occurs only in the third leg and is given when for several weeks, the two averages no longer "confirm" each other.

That's all there is to the Dow theory. It's very simple.

Now my dear Mr. May, I hope I haven't insulted you in any way. This letter is merely to point out what I think are part of your misconceptions of the simple Dow Theory, which you have learned from others and not from the teachings of Hamilton and Rhea.

Whether the Theory may be hogwash, I don't know. I know only that for the last 63 years, it has worked for those who really understood it. We Dow theorists don't want to convince any one of the Theory at all. Since there are less than 300 of us, we are very content that we don't have a lot of followers because, as you pointed out, if too many followed the Theory, there would naturally be no theory which we could use.

ROGER B. SMITH

Wauchula, Florida

* * *

Mr. Smith's communication is particularly interesting in typifying the defense offered on behalf of other "technical" market-beating *systems* along with the Dow doings.

First, as we have previously pointed out, there is the basic habit, observed by the practitioners, of maintaining the sanctity of the "system" at all costs; while shifting the responsibility for flaws and errors to the faithful followers, or, as by our correspondent, on to the uninitiated (*cf.*, "I have yet to find a single non-specialist who seems to understand the Dow Theory.")

Then, there is the proclivity to bring in other factors, outside the established "pure" technical rules. Such "deviation" engaged in by Mr. Smith, chart-wise, is seen in his reference to "zigging and zagging, to be in gear." Likewise, it appears that the Theory's currently publicized spokesman, when necessary, takes into account such "extra" items as volume and short-interest indices, yields; and even anticipated business conditions—for moral support (?).

Furthermore, the need is emphasized for beating the System's own "gun."

The Lag in Recognition

Somewhat a-typical, and certainly more unjustifiable, is Mr. Smith's defense of the lengthy lag before the definite certification that a bear or bull market has actually begun. To provide amelioration of this crucial Dow flaw, is his insistence on the allegedly relative unimportance of that delayed "confirmation."

Actually, as explained by the authority whom he validates, Mr. Russell, the awaited "confirmation" constitutes the indispensable "Signal." In explaining the Theory, he wrote (in *Barron's* December 1, 1958): "If [sic] in due time the two Averages top their previous high point, the bull market will be taken as continuing. However, if one or both the Averages refuse to go over the previous high point, and the two Averages then decline on increasing volume, breaking the low point of the secondary reaction, we [sic] then must say that the bull market has ended and a bear market has been operating since the high point. After the bear market signal has been given, we [sic] then will go back and reclassify the entire secondary reaction as the first primary swing in a new bear market, and the retracement will be reclassified as the first secondary reaction (upward) in a bear market." Thus, far from functioning as an unimportant validater, the delayed signal is the crux in re-classification and definition.

With this Mr. Russell has been entirely consistent in his recent pronouncement, verbal and written, on March 3, that the bear market had begun back in July. In a key article, captioned "Bear Market Signalled," published March 7 in *Barron's*, he stated, "On March 3, 1960, the 20 stocks which constitute the Dow-Jones Rail Average closed under their November low. This move confirmed the February 16 penetration by Industrials through their respective September low. According to the classic theory formulated by Charles H. Dow at the turn of the century, the two Averages thus have given the signal for a bear market in stocks. This means that the great bull market which began on June 13, 1949, ended on July 8, 1959. The movements [sic] since then have been part of a bear market."

If Mr. Smith has, as he indicates, in his own market policy deviated from this clear-cut basic Dow rule, then he is instead really defending the "Smith Theory."

Conclusion

The important conclusion which we get from the various pronouncements and argument is that, just as with the other types of market indicators, the chart systems cannot escape the impossibility of *timing* the turns and the lags:—how high is too high, how speculative is too speculative?

Robert Beak Now With Straus, Blosser

(Special to THE FINANCIAL CHRONICLE)

CHICAGO, Ill.—Robert M. Beak has become associated with Straus, Blosser & McDowell, 39 South La Salle Street, members of the New York and Midwest Stock Exchanges. Mr. Beak in the past was with A. C. Allyn and Company and Bond & Goodwin Incorporated.

Broadcasting: Course Ahead

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hunger for more of their specialties.

Satisfying the Minority

It is in part at least because of this unfulfilled appetite that television is accused today of a tired and static maturity. The facts are to the contrary. Television is in a stage of technological and creative ferment. In terms of specialized activities, television is approaching the growth phase that the mass appeal service began experiencing a decade ago. Foundations, private companies, commercial networks, stations, endowments, universities are pouring funds and creative effort into educational and experimental television.

Technical developments, I firmly believe, will one day provide numerous additional channels capable of supplying many different services to small audiences with special educational, scientific and cultural interests. A medical network is being formed, special telecasts for classrooms are growing in number, new closed circuit applications are emerging daily and stations specializing in minority programming are on the increase.

But if we are to fit all these ancillary services into a proportioned spectrum of television for the mass and for the minority, we must first penetrate that curtain of intellectual distrust and misunderstanding which hardens at a dangerous rate; and we must do so by enlisting the best of American brains to help us seek that proper proportion.

Favors Top Flight Conferences

As an initial step I suggest that the broadcasting industry, through an appropriate industry organization, sponsor an annual conference along the lines of the highly successful American Assembly of Arden House. Its purpose would be to analyze the role of television, in all of its aspects, in American life.

To it would be invited leaders of all areas of American thought and endeavor—leaders in government, religion, education, business, labor, advertising and publishing. In an appropriately cloistered atmosphere, away from klieg lights, microphones, printing presses, the broadcaster and his guests could exchange views face to face, could seek new ideas from each other, could clarify misunderstandings, could explore new uses of the specialized services and in the process perhaps could dislodge chips from shoulders on all sides of the table.

These would be no summit conferences conducted in secrecy for the purpose of deciding the fate of television. Neither would they constitute a solicitation from the commercial broadcaster for someone else to shoulder his obligations. To seek informed advice is not to abdicate responsibility; it is the timorous leader, not the bold one, who fears fresh ideas or a change of status.

In their best sense I see such assemblies as a rational and considered attempt to place in clear perspective the role of all television in our society. Ultimately they might evolve into a broader examination of all mass communications as they relate to contemporary civilization. Few subjects could be more pertinent at this stage of our democratic evolution.

It is my hope that such annual assemblies will materialize promptly, perhaps this year. And if they do, I suggest that each delegate be given a badge with Michelangelo's famous phrase imprinted on it: "Ancora Imparo"—"I am still learning." Television has much to learn from others, but others, I respectfully suggest, also have much to learn about television. It is, like the society in which it exists, neither all good nor all bad. It is a viable service with formidable opportunities for use or misuse. The public, as well as the industry, can benefit more from constructive critical interest than from biased attack or hostile neglect.

Above all, television can benefit from a period of reflective calm in which to assess its progress, its mistakes, its prospects. An assembly such as I suggest, perhaps conducted under academic auspices, could be an important approach toward meeting that need.

To those who have honored me so generously, may I offer this final hope: that they will study this first-step proposal to bridge a widening gulf of misunderstanding and mistrust; and that after doing so, they will, if they find merit in it, place their formidable influence behind it. They are the leaders of this industry, and the decision properly should come from them.

Broadcasting has its problems, it also has its rewards.

*An address by General Sarnoff upon the occasion of receiving the first gold medal award from the Radio and Television Executive Society at its 20th Anniversary, New York City.

Mutsuji Nakano

Mutsuji Nakano is engaging in a securities business from offices at 111 Broadway, New York City.

WASHINGTON AND YOU

BEHIND-THE-SCENES INTERPRETATIONS FROM THE NATION'S CAPITAL

WASHINGTON, D. C.—Youngsters all over the country are talking about man landing on the moon in the not too distant future. They are excited over the prospects.

In the Department of Defense, on Capitol Hill, at General Electric, Westinghouse, RCA, and numerous other places they have begun tackling the space age problems. Aerospace is already big business and it is going to get bigger and bigger.

By the time the census enumerators are making their next decennial count 10 years from now, the electronic business may be the largest industry in the United States. Numerous experts believe the industry will be the foremost industry, even without the challenge from the space age.

Huge Expenditures

Billions and billions of tax dollars are going to be spent in the race with Russia in the field of space satellites, rockets and missiles. As a matter of fact, billions are already blue printed. Experts testifying before Congressional committees seem to agree that the exploration into space is just beginning.

Putting man on the moon is but one step in the overall space age era. Space age travel will offer many problems, and electronic engineers in and out of the government are going to try and solve some of them during the coming decade.

Incidentally, there are more engineers of various kinds employed by the United States Government today than any other time in history. Some agencies of the government are recruiting engineers just like coaches recruit college and professional football players.

Controversial Subject

There has been a great amount of debate this year on the national space program. There is going to be a lot more. There have been charges and counter charges. A lot of people are confused. This is natural because of all kinds of comparisons made between the missile and space race between the Soviet Union and the United States.

The other day the first chairman of the Committee on Science and Astronautics in the House of Representatives flew to the University of California (Los Angeles) to participate in a panel discussion on the place of our Government in the utilization of space. The chairman, Representative Overton Brooks, probably knows more about the space role that our Government is going to take for the next two or three years, than any one else on Capitol Hill.

Representative Brooks and his committee work closely with Dr. T. Keith Glennan, administrator of the civilian space agency, and with industry leaders in the development of our space age.

It is estimated that about 50% of the electronic industry's know-how is currently devoted to Government and defense projects.

Representative Brooks after long hearings before his committee points out that people have been dreaming for centuries about space travel. Now that we have means to make the dream come true, however, he says there are grave doubts in the minds of many people about the value of our space program.

Benefits Cited

"The value of our space program is both psychological and military, in the cold war and the hot war alike, and could be amply justified on either ground," said the dean of the Louisiana Congressional delegation. "If you happen to be a teacher or a housewife, it may be hard to think of outer space as something that affects you. Yet it does just this; and sooner or later a lot of our prosperity as well as our national security is going to be wrapped up in outer space.

"We can look forward to better and cheaper methods of radio communication, weather forecasting and navigation by means of satellites. Already new developments in treating diseases and in analyzing the human anatomy, which will have a direct effect upon human beings, are being developed in our space program. New space exploration may unclock the ancient secrets about the origin and use of the solar system and even of life itself.

"Admittedly, such wonders lie in the future. Yet I expect to see some of them myself in the next 10 years or so. At present, space exploration is first and foremost a new means of scientific research. Naturally, this aspect appeals to the scientific community, both at home and abroad. It is only the beginning."

Value to Communications

Some of our foremost electronic experts forecast that nearly all of our billions appropriated by Congress in the immediate years ahead will be earmarked for vehicles that will operate within 25,000 miles of the earth.

It is within this radius, they declare, that is offered the most space age miracles in world-wide communications. The world's communications bands are presently overworked. They point out that the electronic spectrum is accommodating millions of pieces of transmitting and receiving equipment.

Any piece of equipment that carries electrical current or sends out radiations may be sources of trouble. Of course, electrical storms and sun spots have been natural sources of trouble ever since radio and television came into being. The exploration in the space age may be able to stamp out these interferences in the future.

Military Potentialities

The moon has been used as a relay station for signals from one part of the earth to another. Representative Brooks and his Committee colleagues say that time is approaching when through use of a satellite it will be possible for the people in New York City to receive "live" television from Tokyo or Rome.

All means of communication and conveyance have military potentialities, and having these potentialities, are subject to military use, says the Chairman of the House Space Committee. Nuclear energy in time may be diverted almost entirely to meet civilian energy requirements, but will continue to have important military applications. Space developments, too, may be devoted to peacetime pursuits and requirements, but they will still have vital military applications, says Mr. Brooks.

What is most needed in space research? Basic research is fundamental, not only in the field of space but also in other types of research and development. For example, asserts Mr. Brooks, the knowledge we gain from the Man-in-Space program will apply to the medical treatment of Man-on-Earth.

As research increases, the engineers face multiple problems. Metals and metalworking techniques are confronting the engineers. Their problems become more complex.

The new metals and alloys are expensive to produce. Thus it is little wonder that the space costs will continue to increase year after year. Spending by the government is going to exceed $1 billion a year in another year or so.

Non-Governmental Activity

Private industry is also spending many, many millions in its research and development. For instance General Electric in connection with its major role of advancing technology in the space age, is building a missile and space research center near Valley Forge, Pa., costing millions of dollars.

Westinghouse likewise is spending many millions in connection with its role of space technology. The company has done susbtantial research on metals, among other things. Radio Corporation of America (RCA) is proud of the "Tiros" satellite which transmitted weather reports from around the world from outer space.

"For the first time in history, Smithsonian Institution has ventured to forecast monthly rainfall eight years in advance for definite cities, stating the exact expected percentage departures from the normal rainfall," said Congressman Brooks. "Increasingly accurate predictions are going to be made in the future covering long range predictions. Such help will give business, industry and especially agriculture, a needed shot in the arm in planning producing seasons in advance in times of bad weather."

We are living in an age of miracles.

[This column is intended to reflect the "behind the scene" interpretation from the nation's Capital and may or may not coincide with the "Chronicle's" own views.]

COMING EVENTS

IN INVESTMENT FIELD

April 27, 1960 (Boston, Mass.) New England Group of Investment Bankers Association meeting.

April 28-29, 1960 (St. Louis, Mo.) St. Louis Municipal Dealers Group Spring Party: Luncheon at Missouri Athletic Club, cocktail party and banquet at Park Plaza Hotel, April 28; Field Day at Glen Echo Country Club, April 29.

April 29, 1960 (New York City) Security Traders Association of New York annual dinner at the Waldorf Astoria.

May 9-10, 1960 (Atlanta, Ga.) Association of Stock Exchange Firms meeting of Board of Governors at Hotel Atlanta Biltmore.

May 11-14, 1960 (White Sulphur Springs, W. Va.) Meeting of the Board of Governors of the Investment Bankers Association.

May 17-18, 1960 (Omaha, Neb.) Nebraska Investment Bankers Association annual Field Day.

May 19-20, 1960 (Nashville, Tenn.) Nashville Security Traders Association Spring Party; cocktails and dinner May 19 at Hillwood Country Club; outing May 20 at Bellemeade Country Club.

May 20, 1960 (Baltimore, Md.) Baltimore Security Traders Association annual spring outing at Maryland Country Club.

May 20, 1960 (Rolling Rock, Pa.) Western Pennsylvania Group of Investment Bankers Association Meeting.

May 28, 1960 (Dallas, Texas) Dallas Security Dealers Association annual spring party at the Northwood Club.

June 2-5, 1960 (Ponte Vedra, Fla.) Southern Group of Investment Bankers Association meeting.

June 9, 1960 (Des Moines, Iowa) Iowa Investment Bankers Silver Anniversary field day at the Wakonda Club.